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**THE OCCUPATIONAL SAFETY AND HEALTH (BUILDING AND
CONSTRUCTION INDUSTRY) RULES, 2015**

ARRANGEMENT OF RULES

**PART I
PRELIMINARY**

<i>Rule</i>	<i>Title</i>
1.	Citation
2.	Application
3.	Interpretation

**PART II
DUTIES AND RESPONSIBILITIES**

4.	General duties of contractor
5.	Appointment of safety and health supervisor
6.	Notification concerning occupational injury and diseases
7.	Plans for safety arrangements
8.	Duties of Clients/Employer
9.	Duties of main contractor
10.	Structures
11.	Formwork and support work
12.	Duties of designer

13. Responsibilities of workers

PART III
POST-TENDER QUALIFICATIONS

14. Post occupational safety and health qualification

PART IV
RISK ASSESSMENT

15. Risk assessment

PART V
SAFETY MEASURES

- 16. Fencing of machinery
- 17. Fencing of new machinery
- 18. Electricity
- 19. Lighting
- 20. Projecting nails and loose material
- 21. Construction of temporary measures
- 22. Avoidance of danger from collapse of structure
- 23. Hand tools portable power driven tools
- 24. Inhalation of dust and fumes
- 25. Ventilation of excavations
- 26. Internal combustion engines
- 27. Generation of steam, smoke and vapour
- 28. Noise
- 29. Strenuous works
- 30. Strenuous works in high temperatures
- 31. Personal protective equipment
- 32. Fire protection and prevention
- 33. Liquefied petroleum gases and highly flammable liquids

PART VI

HEALTH AND WELFARE

- 34. Shelters and accommodation for clothing and meals
- 35. Washing facilities
- 36. Number of sanitary conveniences
- 37. Other requirements as to sanitary conveniences
- 38. Safe access to facilities
- 39. First aid equipment
- 40. First aid rooms
- 41. First aiders

PART VII KEEPING OF RECORDS

- 42. Reports and certificates

PART VIII SAFETY IN VEHICLES

- 43. Competent persons to drive vehicles
- 44. Mechanical propelled vehicles and trailers
- 45. Riding in insecure positions on vehicles
- 46. Remaining on vehicles during loading
- 47. Vehicles near edge of excavation

PART IX WORKING PLATFORMS

- 48. General
- 49. Supervision of work and inspection of material
- 50. Construction and material
- 51. Defective material
- 52. Maintenance of scaffold
- 53. Partly erected or partly dismantled scaffold
- 54. Standards or uprights edgers and putlogs
- 55. Ladders used in scaffolds
- 56. Stability of scaffolds
- 57. Slung scaffolds
- 58. Cantilever jib, figure and bracket fold

- 59. Support for scaffolds etc
- 60. Suspended scaffolds (not power operated)
- 61. Boatswains, chair, cages and skips (not power operated)
- 62. Trestle scaffolds
- 63. Inspection of scaffolds, boatswains' chairs etc
- 64. Scaffold used by workmen of different employers
- 65. Construction of working platforms, gangways and runs
- 66. Boards and planks in working platform
- 67. Width of working platform
- 68. Width of gangways and runs
- 69. Guardrails and toe boards at working platforms and places
- 70. Guardrails etc, for gangways 60, runs and stairs
- 71. Platforms, gangways, runs and stairs, etc to afford safe foothold
- 72. Construction and maintenance of ladders and folding step ladders
- 73. Use of ladders and folding stepladders
- 74. Openings, corners, breaks, edges and open joists
- 75. Exceptions to rule 55
- 76. Work on roofs
- 77. Sloping roofs
- 78. Working on or near fragile roofs
- 79. Loads on scaffolds
- 80. Prevention on falls and provision of safety nets and belts

PART X
FALL PROTECTION

- 81. Fall protection

PART XI
LIFTING OPERATIONS

- 82. Lifting machinery in workplaces and in docks etc
- 83. Delivery of loads with lifting gears attached
- 84. Hoists forming part of permanent equipment
- 85. Hoists manufactured before the commencement of these rules
- 86. Construction, maintenance and inspections
- 87. Support, anchoring, fixing and erecting
- 88. Precaution where lifting has traveling or slewing motion
- 89. Platforms for crane drivers and signalers

90. Cabin for drivers
91. Drums and pulleys
92. Brakes, controls, safety devices etc
93. Safe means of access
94. Poles or beams supporting pulley blocks or gin wheels
95. Stability of lifting appliances
96. Rail mounted cranes
97. Mounting of cranes
98. Cranes with derricking jibs
99. Restrictions on use of cranes
100. Use of cranes with timber structural member prohibited
101. Erection of cranes under supervision
102. Competent persons to operate lifting appliances and give signals
103. Signals
104. Testing and examination of cranes
105. Marking of safe load
106. Indication of safe working load
107. Load not to exceed safe working load
108. Precaution on raising or lowering loads
109. Scotch and guy derrick cranes
110. Construction, testing, examination and safe working loads
111. Testing of chins, rings etc, altered or repaired by welding
112. Hooks
113. Slings
114. Edges of load not to come into contact with sling etc
115. Knotted chains
116. Examination of chain ropes and lifting gear
117. Annealing of chain and lifting gear
118. Fety of hoist ways, platforms and cages
119. Operations of hoists
120. Winches
121. Safe working load and marking of hoists
122. Tests and examination of hoists
123. Carrying persons by means of lifting appliances
124. Hoists carrying persons
125. Secureness of load

PART XII

EXCAVATIONS SHAFTS AND TUNNELS

- 126. Prevention of danger
- 127. Inspection and examination of excavations
- 128. Supervision and execution of timbering and other work
- 129. Means of egress in case of flooding
- 130. Prevention of collapse of structure
- 131. Fencing of excavation
- 132. Safeguarding edges of excavation
- 133. Construction and maintenance
- 134. Means of egress in case of flooding
- 135. Supervision of work and inspection of materials
- 136. Inspections and examinations
- 137. Transport by water
- 138. Prevention of drowning
- 139. Road works
- 140. Explosives

PART XIII DEMOLITION

- 141. Application of Part
- 142. Joint operations
- 143. Fire and flooding
- 144. Precaution in connection with demolition

PART XIV OFFENCES AND PENALTIES

- 145. Offences and penalties

SCHEDULES

THE OCCUPATIONAL SAFETY AND HEALTH ACT,
(CAP.297)

RULES

(Made under section 109)

THE OCCUPATIONAL SAFETY AND HEALTH (BUILDING AND
CONSTRUCTION INDUSTRY) RULES, 2015

PART I
PRELIMINARY PROVISIONS

- | | |
|----------------|--|
| Citation | 1. These Rules may be cited as the Occupational Health and Safety (Building and Construction Industry) Rules, 2015. |
| Application | 2.-(1) These Rules shall apply to building operations and works of engineering construction undertaken:-

(a) by way of trade or business or for the purpose of any industrial or commercial undertaking, and any other building or work of construction which last for more than thirty days;

(b) by or on behalf of the Government, local authority or a public body.

(2) A reference to building operations and works of engineering construction in these Rules shall be a reference to those operations and works to which these Rules applies. |
| Interpretation | 3. In these Rules, unless the context otherwise requires:- |

Cap.297

“the Act” means the Occupational Safety and Health Act, 2003;

“building operations” means the construction, structural alteration, repair or maintenance of a building (including repainting, redecoration and external cleaning of the structure), the demolition of a building and the preparation for and laying of the foundation of an intended building, but does not include any operation which is a work of engineering construction;

“bills of quantities” means a priced document prepared by the Consultant (quantity surveyor engineer) that itemizes list of materials, parts, and labor (with their costs) required to construct, maintain, or repair a specific structure to provide sufficient information on the quantities of Works to be performed to enable bids to be prepared efficiently and accurately; and when a contract has been entered into, to provide a priced bill of quantities for use in the periodic valuation of works executed;

“chief inspector” means the chief inspector appointed under section 4 of the Act;

“competent person” includes the safety and health supervisor and any other person qualified by experience or otherwise accredited by OSHA for the purpose for which he is required under these Rules;

“construction work” means any work in connection with:-

- (a) the erection, maintenance, alteration, renovation, repair demolition or dismantling of or addition to a building or any similar structure;
- (b) the installation, erection, dismantling or maintenance of a fixed plant;
- (c) the construction, maintenance, demolition or dismantling of any bridge, dam canal, road, railway, runaway, sewer or water reticulation system or any similar civil engineering structure; or
- (d) the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work;

“contractor” means a person or a firm who is undertaking a building operation or works of engineering construction and includes a sub-contractor;

“design” in relation to any structure includes drawings ,calculations, design details, and specifications;

“designer” means any person who is registered by relevant a authority to-

- (a) incept, plan, prepare and undertake a design;
- (b) check and approve a design and specifications;
- (c) arranges for any person at work under his control to prepare a design;
- (d) an architect or engineer contributing to, or having overall responsibility for the design;

- (e) engineer designing details for fixed plants;
- (f) contractor carrying out design work as part of a design and build project;
- (g) temporary work engineer designing formwork and false work;
- (h) interior designer, shop-fitter and landscape architect; or

“excavation work” means the making of any man-made cavity, trench, pit, or depression formed by cutting, digging or scooping;

“fall arrest equipment” means equipment used to arrest a person in a fall from an elevated position, including personal equipment body harness lanyards, deceleration devices lifelines or similar equipment, but excludes body belts;

“fall prevention equipment” means equipment used to prevent persons from falling from an elevated position, including personal equipment, body harness lanyards lifelines or physical equipment, guardrails, screens barricades, anchorages or similar equipment;

“fall protection plan” means a documented plan, of all risks relating to working from an elevated position, considering the nature of work undertaken, and setting out the procedures and methods to be applied in order to eliminate risks;

“health and safety file” means a file, or other record in permanent form containing information required as contemplated in these Rules;

“health and safety plan” means a documented plan prepared according guidelines issued by OSHA, which addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified;

“hoist” means a lifting machine, whether worked by mechanical power or not, with a carriage, platform or cage the movement of which is restricted by a guide;

“ladder” does not include a folding step-ladder;

“ladder-scaffold” means a scaffold with a working platform which is supported directly on a ladder or by means of a crutch or bracket on a rung of a ladder;

“lifting appliance” means a crab, winch, pulley block or gin wheel used for raising or lowering and includes a hoist, crane, sheer legs, excavator, dragline, piling frame, aerial cableway, aerial ropeway and overhead runway;

“lifting gear” means a chain, sling, rope sling or similar gear and includes a link, plate clamp, shackle, swivel or eye-bolt;

“main contractor” means a person or a firm who performs construction work who is appointed by the client to be in overall control and management of a part or the whole of a construction site;

“material hoist” means a hoist used to lower or raise material and equipment, and includes cantilevered platform hoists, mobile hoists,

friction drive hoists, scaffold hoists, rack and pinion hoists and combination hoists;

“mobile crane” means a crane capable of traveling under its own power but does not include a crane which travels on a line or rails;

“plant or equipment” includes any plant, equipment, gear, machinery, apparatus or appliance or any part thereof;

“raising or lowering as a means of suspension” where this expression occurs in rules 110, 111, 112, 117 means raising or lowering or as a means of suspension either of a load on a lifting appliance or lifting gear or of a scaffold but does not include the use of a rope or chain solely as a means of lashing or securing together two or more rigid members of scaffold to form a frame or as a means of making a lapped joint or the use of a rope or chain solely for the movement of a load in a horizontal direction;

“risk assessment” means a programme to determine any risk associated with any hazard at a construction site, and identify steps to be taken to remove, reduce or control such hazard;

“safe forking load” means-

- (a) the relevant safe working load required to be specified in the latest certificate of test obtained; or

“scaffold” means any temporary elevated platform and supporting structure used for providing access to and supporting workmen or materials or both but does not include, a lifting appliance or a structure used merely to support such an appliance or to support other plant or equipment;

“site” means any place where building operations or works of engineering construction or both operations and works are carried on;

“slung scaffold” means a scaffold suspended by means of lifting gear, ropes, chains or rigid members which cannot be raised or lowered by a lifting appliance;

“sub-contractor” means person or firm that has a contract to do part of a job which another firm is responsible for;

“suspended scaffold” means a scaffold (not being a slung scaffold) suspended by means of ropes or chains and capable of being raised or lowered, but does not include a boatswain’s chair or similar appliance;

“trestle scaffold” includes any scaffold in which the supports for the platform is done through spilt heads, folding step-ladders, tripods or movable contrivances similar to any of the foregoing;

“tunneling” means the construction of any tunnel beneath the natural surface of the earth for a purpose other than the searching for or winning of a mineral

“work of engineering construction” means-

- (a) the construction of any railway line or siding otherwise than upon an existing

railway;

(b) the construction, structural alteration or repair including repainting;

(c) the construction or demolition of any dock, harbor, inland navigation, tunnel, bridge, viaduct, waterworks, reservoir, pipeline, aqueduct, sewer, sewage works or gasholder, except where carried on upon a railway or tramway; or

any other work as may be specified by the Act;

“working platform” includes a working stage.

PART II

DUTIES AND RESPONSIBILITIES

General duties of
contractor

4.-(1) A contractor shall comply with the requirements of these Rules that provide the assurance of health, safety and welfare of all persons engaged in-

(a) building operations or works of engineering construction undertaken by him; or

(b) in any activity incidental to and at the site of the building operations or works of engineering construction or construction work.

(2) Wherever two or more contractors occupy a site at the same time, shall co-operate to ensure safe working conditions.

(3) Except in such cases as may be prescribed, it shall be the duty of every contractor to -

- (a) prepare as often as may be appropriate a revised written statement of his general policy with respect to the health, safety, and welfare of his employees, at building operations or works of engineering construction;
- (b) prepare the organization and arrangements for carrying out the policy; and
- (c) bring the statement and any revision of the policy to the notice of all of his employees.

(4) Every contractor has a duty to carry out his work in such a way that persons not in his employment who may be affected by it are not exposed to risk.

provided that protection to any one including members of the general public who might be affected by work activities as well as to the employees of other employers concerned with the work.

Appointment of
safety and health
officer

5.-(1) A contractor who employs more than ten persons shall, for every site on which he is the contractor, appoint one or more persons experienced in the operations or works carried on at the site and suitably qualified for that purpose, to-

- (a) advise the contractor as to the observance of the safety, health and welfare requirements under the Act and under these Rules; and
- (b) supervise and ensure the observance of the requirements and promote the safe conduct of work generally at the sites.

(2) A contractor who employs twenty or fewer persons may appoint either himself or another person to be a safety supervisor in accordance with paragraph (1)

(3) The person appointed as a safety officer may be a site engineer, site agent, foreman or charge hand having qualifications, training and the competency and necessary resources to assist the contractor and shall be accredited by the Authority.

(4) The name of every person appointed under this rule shall be notified to the Chief Inspector within 14 days from date of appointment and shall also be entered in a copy of the abstract of these Rules maintained by the contractor.

(5) Nothing in these Rules shall be construed as preventing the same person or persons being appointed for a group of sites or as preventing two or more contractors from jointly appointing the same person or persons.

(6) A person appointed under this rule may be assigned duties additional to the duties mentioned in paragraph (1), provided that he is not prevented by the additional duties from efficiently discharging his duties as a safety officer.

(7) It shall be the duty of every contractor to consult any such safety supervisor with a view to the making and maintenance of arrangements which will enable him and his employees to co-operate effectively in promoting and developing measures to ensure the health, safety and welfare at work of the employees, and in checking the effectiveness of such measures.

Notification of
accidents and
diseases

6. A contractor shall notify the chief inspector in case of accidents and occupational diseases according to the Act.

Plans for safety
arrangements

7.-(1) A contractor shall ensure that a site where these Rules applies has a site layout plan for the safety arrangements showing the construction to be erected, site boundaries, provisions for transport, lifting, storage, electrical supply and other information relevant for the safety and health conditions.

(2) The site lay-out plan shall be part of the Health and safety plan for the site and shall display at the entrance to the site.

(3) The site lay-out plan shall include contact details of contractors or persons responsible for the establishment, maintenance and removal of the installations mentioned under these Rules.

(4) In case there are more than one main contractor on site the contractors shall arrange for one site lay out plan.

Duties of client

8.-(1) A client before commencing or undertaking building operations or works of engineering construction, shall notify the chief inspector in writing of the-

- (a) contractors name and postal address;
 - (b) address or location of the site of the operations or works;
 - (c) date of commencement of the operations or works;
 - (d) expected date of completion;
 - (e) fact that mechanical power is used or not;
 - (f) use of hazardous materials;
 - (g) number of persons expected to be employed;
- and

- (h) other design and supervision team such as surveyor.

(2) The chief inspector may, upon receipt of the notice under paragraph (1) require more information to be supplied as he may think fit, and cause to be entered in a register of contractors maintained by him the information notified to him and shall issue a certificate of registration in a such a form prescribed in the Fourth Schedule.

- (3) A client shall -

- (a) prepare health and safety specifications for the operations or works and provide such specifications to any main contractor who is making a bid or appointed to perform any operations or works;
- (b) prepare the health and safety specification referred in subsection 9 (4) (a) shall be itemized in the Bill of Quantities.
- (c) provide the main contractor and his agent with any information which might affect the health and safety of any person at work carrying out any operations or works;
- (d) appoint each main contractor in writing for the project or part of it on a site;
- (e) take reasonable steps to ensure that each main contractor's health and safety plan is implemented and maintained on the site, except that the steps taken shall include periodic audits in intervals mutually agreed upon between the client and the main contractor, at least once every month;

- (f) stop any contractor from executing any operations or works which is not in accordance with health and safety plan or which poses a threat to the health and safety of persons; and
 - (g) ensure that where changes are brought about to the design or construction, sufficient health and safety information and appropriate resources are made available to the main contractor to execute the operations or works safely;
 - (h) ensure that a main contractor in any operation or work has applied for a post-tender occupation safety and health qualification before tender documents can be accepted for evaluation; and
 - (i) ensure that all workers who work at height are medically examined and are fit to work at height.
- (4) A client -
- (a) shall discuss and negotiate with the main contractor on the contents of the health and safety plan for the site and approve it for implementation;
 - (b) shall ensure that a copy of the health and safety plan is available on request to an employee, inspector or contractor;
 - (c) may appoint an agent in writing to act as his representative and the responsibilities as are imposed by these Rules upon a client, shall as far as reasonably practicable apply to the agent so appointed.
- (5) A client shall not appoint-

- (a) any contractor unless the contractor has applied for post-tender occupational safety and health qualification;
- (b) a main contractor to perform any operations or works unless the client is reasonably satisfied that the main contractor he intends to appoint has the necessary qualifications and resources to carry out the operations or works safely; and
- (c) any person as an agent unless the client is reasonably satisfied that the person he intends to appoint has the necessary qualifications and resources to perform the duties imposed on a client by these Rules.

(6) a client shall make sure that a contractor conduct his operation in such a manner as to ensure, as far as is reasonably practicable, that persons other than those in contractor's employment who may be directly affected by his activities are not exposed to hazards that affects their health and safety.

Duties of main contractor and sub-contractor

9.-(1) A main contractor shall provide and demonstrate to the client a suitable and sufficiently documented health and safety plan which shall be used during the duration of the operations or works.

(2) A main contractor shall take reasonable steps as are necessary to ensure cooperation between all contractors to enable each of the contractors to comply with these Rules.

(3) A main contractor shall be responsible for the following-

- (a) to provide any contractor making a bid or appointed to perform any operations or works with the relevant sections of the health and safety specifications pertaining to the operations or works which has to be performed;
 - (b) to appoint each contractor contemplated in subparagraph (a) in writing for the part of the project on a site;
 - (c) to take reasonable steps to ensure that each contractors' health and safety plan is implemented and maintained on site, except that the steps taken shall include periodic audits at intervals mutually agreed upon between the main contractor and the contractor, at least once a month;
 - (d) to stop any contractor from executing any operations or works, which is not in accordance with the main contractors or contractor's health and safety plan for the site or poses a threat to the health and safety of persons;
 - (e) to ensure that where changes are brought to the design and construction, sufficient health and safety information and appropriate resources are made available to the contractor to execute the work or operations safely.
- (4) A sub-contractor shall-
- (a) provide and demonstrate to the main contractor a suitable and sufficiently documented health and safety plan based on the relevant sections of the main contractors' health and safety specification which shall be

used for the duration of the operations or works;

- (b) ensure that all health and safety documents required under these Rules are opened and kept on site and made available to an inspector, client, clients' agent or main contractor upon request.

(5) A main contractor shall-

- (a) discuss and negotiate with the contractor the contents of the health and safety plan and approve it for implementation;
- (b) ensure that a copy of his health and safety plan and the contractors' health and safety plan specified in paragraph (4)(a) of this rule is available on request to an employee, inspector, contractor, client or clients' agent;
- (c) ensure that a health and safety file and other documents required under the Act and these Rules, is opened and kept on site and made available to an inspector, client, clients' agent or other relevant statutory authority;
- (d) hand over consolidated health and safety file to the client upon completion of the construction work and shall include a record of all drawings, designs, materials used and other similar information concerning the completed structure upon request;

(6) Where a main contractor appoints a sub-contractor to perform construction work, the responsibilities imposed under paragraphs (2) to (5) that applies to the main contractor shall apply to the sub-contractor.

(7) Main contractor shall not appoint sub-contractor to perform construction work under contractual arrangement unless the sub-contractor intended to be appointed has the necessary competencies and resources to perform the construction work safely.

(8) A sub-contractor shall as far as is reasonably practicable, provide the main contractor with any information which might justify a review of the health and safety plan or which might affect the health and safety of any person-

(a) at work carrying out construction work; or

(b) who might be affected by the construction work.

(9) Contractors shall cooperate with main contractors as far as is necessary to enable each of them to comply with the provisions of the Act and these Rules.

(10) A contractor shall provide medical examination for workers under facilitation of the client.

(11) The contractor shall provide Occupational Health and Safety training for workers before commencement of the project under facilitation of the client.

(12) A contractor shall conduct his operation in such a manner as to ensure, as far as is reasonably practicable, that persons other than those in his employment who may be directly affected by his activities are not exposed to hazards that affects their health and safety.

(13) a contractor shall make sure that no employee smokes or use any kind of tobacco at site.

Structures

10.-(1) A contractor shall ensure that-

- (a) all reasonably practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work ; and
 - (b) no structure or part of a structure is loaded in a manner which would render it unsafe.
- (2) The designer of a structure shall-
- (a) before the contract is put out to tender, make available to the client all relevant information about the design of the relevant structure that may affect the pricing of the construction work;
 - (b) inform the contractor in writing of any known or anticipated dangers or hazards relating to the construction work, and make available all relevant information required for the safe execution of the work upon being designed or when the design is subsequently altered;
 - (c) subject to subparagraphs (a) and (b), ensure that the following is included in the report and made available to the contractor-
 - (i) the loading the structure is designed to withstand; and
 - (ii) the methods and sequence of construction process;
 - (d) not include anything in the design of the structure necessitating the use of dangerous procedures or materials hazardous to the health and safety of persons;
 - (e) take into account the hazards relating to any subsequent maintenance of the relevant

structure and design that work to be performed to minimize the risks;

- (f) carry out inspections at appropriate times of the construction work involving the design of the relevant structure to ensure compliance with the design; and
- (g) stop any contractor from executing any construction work which is not in accordance with the relevant design.

(3) A contractor shall ensure that all drawings pertaining to the design of the relevant structure are kept on site and are available on request by an inspector, contractors, client, client's agent or employee.

Formwork and
support work

11.-(1) A contractor shall ensure that-

- (a) all formwork and support work structures are adequately designed, erected, supported, braced and maintained to support all vertical and lateral loads and that no loads are imposed onto the structure that the structure is not designed to withstand;
- (b) all formwork and support work operations are carried out under the supervision of a competent person who has been appointed in writing for that purpose;
- (c) the designs of formwork and support work or support work structure are done with close reference to the structural design drawings and where any uncertainty exists, the structural designer shall be consulted;

- (d) all drawings pertaining to the design of formwork or support work or support work structures are kept on the site and are available on request by an inspector, contractor, client, client's agent or employees;
- (e) all equipments used in the formwork or support work structure are carefully examined and checked for suitability by a competent person before being used;
- (f) all formwork and support work structures are inspected by a competent person immediately before, during and after the placement of concrete or any other imposed load, and thereafter on a daily basis until the formwork and support work structure has been removed and the results have been recorded in a register and made available on site;
- (g) if, after erection, any formwork and support work structure is found to be damaged or weakened to such a degree that its integrity is affected, it shall be safely removed or reinforced immediately;
- (h) as far as is reasonably practicable, the health of any person is not affected through the use of solvents or oils or any other similar substances;
- (i) provision is made for safe access by means of secured ladders or staircases for all work to be carried out on the foundation bearing level;
- (j) the foundation condition is suitable to withstand the weight caused by the formwork and support work structure and any imposed load such that the formwork and support work structure is stable; and

- (k) adequate precautionary measure is taken in order to secure any deck panels against displacement and to prevent any person from slipping on support work or formwork.

Duties of
designers

12. A designer for purposes of construction work shall have the following responsibilities-

- (a) to assist the client to prepare safety and health plan;
- (b) to supervise the contractor to ensure compliance to occupational health and safety measures in accordance to the safety and health plan;
- (c) to avoid foreseeable risks or to combat at source risks to the health and safety of-
 - (i) any person carrying out construction work in or on the structure at any time; or
 - (ii) any other person affected by the construction work;
- (d) to ensure the provision of effective emergency evacuation, necessary safety and health measures, and sufficient firefighting equipment for purposes of a public building or commercial building;
- (e) to ensure that the design includes adequate information provided in the relevant regulations on the project, structure or materials which may affect the health or safety of any person carrying out construction work or on the structure, or any other person who may be affected by the work of such a person.

Responsibilities
of workers

13. A worker in any building operations and works of engineering construction shall have the following responsibilities-

- (a) to take reasonable care for his own safety, health and that of other persons who may be affected by his actions or omission;
- (b) to comply with the safety and health law, instructions and procedures in the health and safety policy;
- (c) to use safety devices and protective equipment as is required and provided by the employer;
- (d) to report to his immediate supervisor any situation which the workers believe may likely cause a hazard to which on their own they cannot rectify;
- (e) to report any accident or injury that may arise in the course of, or in connection with the operation or works.

PART III
POST-TENDER QUALIFICATIONS

Post
occupational
safety and
health
qualifications

14.-(1) Before a client or a consultant awards the tender to the lowest evaluated bidder, the client or consultant shall ensure that a contractor applies for a post-tender occupational safety and health qualification to the chief inspector.

(2) Contractor shall not execute any project without post-tender occupational safety and health qualification.

(3) The costs associated with the application for post-tender occupational safety and health qualification referred to in paragraph (1) shall be borne by the applicant.

(4) A post-tender occupational safety and health qualification shall apply to-

- (a) all projects exceeding a contract sum of one hundred million shillings;
- (b) a main contractor and any subcontractor who runs projects that does not exceed a contract sum of one hundred million shillings but in the opinion of the chief inspector performs work that may involve a particular risk to health and safety of persons.

(5) An applicant for post-tender occupational safety and health qualification shall be audited by or on behalf of the chief inspector against identified criteria specified under paragraph (7) and determined from time to time by the chief inspector.

(6) The criteria used for occupational safety and health post-tender qualification shall include at least the following -

- (a) the applicant has adopted at the highest level of direction and management, a safety and health policy which complies with such principles or standards as the chief inspector may determine from

time to time;

- (b) the chief executive officer of the workplace where the applicant is employed, shall ensure that its board of directors comply with the safety and health policy in its operations;
 - (c) the applicant has employed accredited person or persons with express responsibility for the applicants compliance with its safety and health policy in such intermediate positions or responsibility and authority as the chief inspector considers appropriate having regard to the size, standing and the organization itself;
 - (d) the applicant has taken such steps as the chief inspector considers appropriate-
 - (i) to communicate its safety and health policy to all the employees in the building and construction work engaged therein;
 - (ii) to ensure that the employees comply with the policy;
 - (e) the applicant satisfies the chief inspector that projects that are the subject of an audit has in place effective control against identified hazards.
- (7) The chief inspector shall -
- (a) after consultations with the council, regulatory authorities, workers compensation board, employer and employees representatives, determine a list of hazards and controls against which every applicant shall be audited;
 - (b) determine the standard required at audit in order to attain a post-tender occupational health and safety qualification.

(8) The audit process shall not cease when a contractor attains post-tender occupational safety and health qualifications.

(9) The audit process shall be carried out in three stages, namely-

- (a) at the post-tender qualification;
- (b) after tender award of a project safety management system for the project at hand;
- (c) at intervals during the course of the project.

(10) The chief inspector shall accredit competent auditors to conduct the post-tender occupational health and safety qualifications audits, the after award of tender audits of contractors' project safety management system and the audits during the currency of the project.

(11) The audit shall be of audit of paper systems, on site random inspections of the existence, application and effectiveness of controls in place to guard against the selected range of identifiable risks.

(12) A contractor with, or applying for, post-tender occupational health and safety qualification shall -

- (a) make available for audit all of its sites; and
- (b) cooperate in the conduct of the audit, including making available to the chief inspector reasonable opportunities and facilities to inspect sites, works, plants, equipment and documents and to interview any person therein.

(13) In cases where the review is not favorable, the chief inspector shall-

- (a) impose special conditions for future tender award;
- (b) impose an improvement or probation notice to enable the contractor to implement specific

occupational health and safety measures identified by the chief inspector;

- (c) cancel the post-tender occupational health and safety qualification.

PART IV RISK ASSESSMENT

Risk
assessment

15.-(1) A contractor who performs construction work shall, before the commencement of any construction work and during construction work, cause a risk assessment work to be performed by a competent person appointed in writing and the risk assessment shall form part of the health and safety plan to be applied on the site.

(2) The risk assessment performed under sub-rule (1), shall include at least-

- (a) the identification of the risks and hazards to which persons may be exposed to;
- (b) the analysis and evaluation of the risks and hazards identified;
- (c) a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- (d) a monitoring plan; and
- (e) a review plan.

(3) A contractor shall ensure that-

- (a) a copy of the risk assessment is available on site for inspection by an inspector, client, clients agent, contractor, employee, representative trade union, health and safety representative or any member of

the health and safety committee;

(b) all employees under his control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment; and

(c) all visitors to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site, unless such employee or person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.

(4) A contractor shall consult with the health and safety committee or, if no health and safety committee exists, with a representative group of employees on the development, monitoring and review of the risk assessment.

(5) A contractor shall ensure that all contractors are informed about any hazard as stipulated in the risk assessment before any work commences, and at such times as may be determined in the risk assessment.

(6) Notwithstanding the requirements under subparagraph (3)(b), no contractor shall allow or permit any employee or person to enter any site, unless such employee or person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.

(7) An employee on site shall-

(a) be in possession of proof of health and safety induction training issued by a competent person prior to the commencement of construction work;

(b) carry the proof specified under subparagraph (a) for the duration of the project or for the period that the

employee will be on the construction site.

PART V SAFETY MEASURES

Fencing of
machinery

16. A contractor shall ensure that-

- (a) flywheel;
- (b) moving part of any prime mover;
- (c) part of transmission machinery; and
- (d) part of other machinery, whether or not driven by mechanical,

when on site and not under examination or repaid, is securely fenced to obviate danger or injury to any person employed unless it is in such a position or of such construction as to be as safe as it would be if it was so securely fenced.

Fencing of new
machinery

17.-(1) Without prejudice to rule 118, a contractor shall ensure that a prime mover and other machine intended to be driven by mechanical power, unless constructed before the date of commencement of these Rules, are constructed in a manner that any revolving shaft, flywheel, coupling, toothed gearing, friction gearing, belt and pulley drive, chain and sprocket drive and all projecting screws, bolts or keys on revolving shaft, wheels or pinions on the prime mover or machines are securely fenced or are in such position or of such construction as to be as safe as they would be if they were securely fenced.

(2) This Rule shall not apply to those parts of an energy-generating prime mover which transmits energy from that prime mover to another machine unless the prime mover and the machine are constructed as a unit.

Electricity
G.N. 241 of
1955

18.-(1) The electrical installations and equipment at sites of building operations and works of engineering construction shall be in accordance with the applicable parts of the Electricity (Factories Ordinance) (Amendment) Rules.

(2) Any live electric cable or apparatus at a site which is likely to be a source of danger to persons employed shall, by all practicable means, be rendered electrically dead or otherwise made safe.

(3) All electrical conductors not specifically designed for the purpose of being used in contact with water, shall be kept free from water

lighting

19. Every working place and approach to the working place and every place where raising or lowering operations with the use of lifting appliances are in progress, and all openings dangerous to persons employed, shall whether by natural or artificial means, be adequately and suitably lighted.

Projecting nails
and loose
materials

20.-(1) Timber or material with projecting nails shall not be placed or be allowed to remain in any place at a site where they are a source of danger to persons employed.

(2) Loose materials not required for use shall be removed and be securely stacked or stored in a place where they are not a danger or obstruction to persons employed and they do not render unsafe a floor, roof, or other part of a building or structure.

Construction of
temporary
measures

21. A temporary structure erected for the purpose of operations works to which these Rules applies, not being a scaffold shall, having regard to the purpose for which it is used, be of good construction, adequate strength and stability, sound

material, free from patent defect and shall be properly maintained.

Avoidance of
danger from
collapse of
structure

22.-(1) While a building or other structure is being constructed, renovated or repainted, precautions shall be taken by the use of temporary guys, stays, supports and fixings or other safeguards, to prevent danger to any person employed through the collapse of part of the building or structure during a temporary state of weakness or instability of the building or structure.

(2) Where work is carried on which could reduce the security or stability of part of a building or structure that is being constructed, all practicable steps shall be taken by shoring or otherwise to prevent danger to any person employed from collapse of the building or structure or the fall of any part of it.

Hand tools
portable power
driven tools

23.-(1) All hand and power tools and similar equipment shall be maintained in a safe condition by competent persons.

(2) Wooden handles of hand tools and implements shall be of hard straight grained wood free from cracks and knots.

(3) Impact tools such as chisels shall be kept free from mushroomed heads.

(4) Power driven tools where the moving parts are likely to cause injury shall be guarded as far as is reasonably practicable.

(5) Only employees who have been properly trained in the operation of electric power operated tools, pneumatic tools, fuel powered tools and powder actuated tools shall be allowed to operate power driven tools.

Inhalation of
dust and fumes
to be prevented

24.-(1) Production methods and material not emitting dust or fumes likely to be injurious to the health of persons employed shall be used wherever practicable.

(2) Subject to paragraph (1) wherever dust or fumes likely to be injurious to the health of persons employed, are given off, all sufficient measures shall be taken to prevent the inhalation of the dust or fumes by the persons employed by ensuring adequate ventilation or providing suitable respirators at the place where the operation or work is carried on.

Ventilation of
excavations,

25.-(1) Effective steps shall be taken to ensure and maintain adequate ventilation of every working place in any excavation, pit, hole, ditch, tunnel, shaft or caisson and in any other enclosed or confined space where building operations or works of engineering construction are carried on and of every approach to those working places and enclosed or confined spaces so as-

(a) to maintain an atmosphere which is fit for respiration; and

(b) to render harmless, so far as is reasonably practicable, all fumes, dust or other impurities in the atmosphere therein, which may be dangerous or injurious to health and which are generated, produced or released by explosives or by any other means.

(2) Notwithstanding paragraph (1), where there is reason to believe that the atmosphere in any of the working place or approaches to the working place is poisonous or asphyxiating, no person shall be employed in or allowed to enter the working place or its approach until the atmosphere is suitably tested by or under the immediate supervision of a competent person, and he is satisfied that the working place or approach is free from the danger being overcome by poisoning or asphyxiation.

(3) A person shall not be held not to have complied with requirements of paragraphs (1) and (2) of this rule by reason of any matter proved to have been due to physical conditions over which he had no control and against which it was not reasonably practicable for him to make provision.

Internal
combustion
engines

26. Stationary internal combustion engine shall not be used unless provision is made for conducting the exhaust gases from the engine into the open air.

Generation of
steam, smoke
and vapour

27. A contractor shall take measures to prevent, so far as practicable, steam, smoke or other vapour generated at a site where persons employed are present from obscuring any part of the work or operation or any scaffolding, machinery or other plant or equipment.

Noise

28.-(1) Where noise that is likely to be injurious to the hearing of persons employed is emitted, all sufficient measures shall be taken to reduce the noise to a level that will likely not induce hearing loss.

(2) If it is not reasonably practicable to reduce the noise according to paragraph (1) the persons employed shall be provided with suitable hearing protection equipment.

Strenuous
works

29.-(1) Work shall be arranged so that unnecessary strenuous working positions and movements are avoided, and the person employed shall be given possibilities to vary these working conditions to the extent that is reasonably practicable.

(2) A person shall not be employed to lift, carry or move a load so heavy as to be likely to cause injury to him.

Strenuous
works in high
temperatures

30. At places where strenuous work in high temperatures is carried out, arrangements to provide sufficient wholesome drinking water shall be made.

Personal
protective
equipment

31.-(1) Personal protective equipment shall be sought to eliminate those risks of accident or ill-health that may arise after taking all other reasonably practicable precautionary measures.

(2) For the purpose of this rule, "personal protective equipment" includes, safety shoes or boots, safety helmets, respirators, eye protectors, hearing protectors, safety gloves, protective clothing, safety belts and safety harness.

(3) The contractor or employer, shall provide the employee, with suitable and adequate personal protective equipment.

(4) The employee shall give the employee adequate instruction concerning proper use and safe keeping of the protective equipment.

(5) The employee shall use the necessary personal protective equipment provided

(6) Defective equipment shall not be used.

(7) No person shall be allowed to enter in a construction site without a safety belt and a helmet

Fire protection
and prevention

32.-(1) Places where workers are employed shall, if necessary to prevent danger, be provided with -

(a) suitable and sufficient fire extinguishing equipment or materials; and

(b) an adequate water supply at ample pressure.

(2) The employer shall be responsible for the development and maintenance of effective fire protection and precautions at the site throughout all phases of the construction, repair, alteration, or demolition work.

Liquefied
petroleum
gases and
highly
flammable
liquids

33.-(1) All liquefied petroleum gases not in use shall be stored-

- (a) in a suitable underground reservoirs or suitable fixed storage tanks in safe positions in the open air;
- (b) in a suitable movable storage tanks in safe positions in the open air; or
- (c) in a suitable cylinders in safe positions in the open air or in a storeroom which is adequately ventilated, which is either in safe position or is a fire resisting structure, and which is not used for any purpose other than the storage of liquefied petroleum gases or acetylene cylinders.

(2) Highly flammable liquids shall be stored in-

- (a) suitable storage tanks in safe positions;
- (b) suitable closed vessels in a safe position in the open air protected against direct sunlight; or
- (c) suitable closed vessels in a storeroom which is in a safe position or is a fire resisting structure.

PART VI HEALTH AND WELFARE

Shelters and
accommodation
for clothing and
meals

34.-(1) Subject to the provisions of paragraphs (2) and (3) there shall be provided at, or in the immediate vicinity of every site for the use of the persons employed and conveniently

accessible to them-

- (a) adequate and suitable accommodation for taking shelter during interruption of work owing to bad weather and for keeping clothing not worn during working hours, being accommodation containing such arrangements as are reasonably practicable for enabling persons to warm themselves and for drying wet clothing;
- (b) adequate and suitable accommodation for the keeping of protective clothing used for work and kept, when not in use, at or in the immediate vicinity of the site, with arrangements for drying the clothing if it becomes wet;
- (c) adequate and suitable accommodation, affording protection from the weather and including sufficient tables and seats or benches for taking meals, with facilities for boiling water and;
- (d) adequate and suitable facilities for warming food, where a contractor has more than 10 persons in his employment on a site and heated food is not otherwise available on the site; and
- (e) adequate and clean supply of drinking water at a convenient point or convenient points and clearly marked "DRINKING WATER" or patently intended to be used as such.

(2) For the purposes of paragraph (c) of subrule (1), in determining whether accommodation of any kind provided in pursuance of that sub paragraph at any time and place is adequate, regard shall be had to the number of persons who appear to be likely to use such accommodation at that time and place.

(3) For the purposes of paragraphs (a), (b) and (c) of subrule (1), in determining whether accommodation is

conveniently accessible, account shall be taken on any transport provided at appropriate times for the persons employed.

(4) All accommodations provided in pursuance of paragraphs (a), and (c) of subrule (1), shall -

(a) be kept in a clean and orderly condition; and

(b) not be used for the deposit or storage of materials or plant.

Washing
facilities

35.-(1) Every contractor who has in his employment on a site one or more persons of whom at least one is present on the site on any occasion for more than four consecutive hours, shall provide adequate and suitable facilities for washing including a sufficient supply of soap and water and adequate troughs, basins or buckets.

(2) Washing facilities provided in pursuance of this rule shall be conveniently accessible from the accommodation for taking meals provided in pursuance of rule 34(1) and shall be kept in a clean and orderly condition.

Number of
sanitary
conveniences

36.-(1) Subject to sub-rule (2) of this rule, a contractor shall provide at least one suitable sanitary convenience, not being a convenience suitable only as a urinal, for every twenty five persons in his employment on a site.

(2) Where a contractor has more than one hundred persons in his employment on a site, and sufficient urinal accommodation is also provided, it shall be sufficient if there is one urinal accommodation for every twenty five persons in his employment on the site up to the first one hundred and one for every thirty five persons thereafter.

(3) In calculating the number of conveniences required by this rule any number of persons less than twenty five or five, or in excess of a multiple of twenty five or thirty five, as the

case may be, shall be reckoned as twenty five or thirty five.

Other
requirements as
to sanitary
conveniences

37.-(1) Every sanitary convenience shall be sufficiently ventilated, and shall not communicate with any workroom or mess room except through the open air or through an intervening ventilated space.

(2) Every sanitary convenience, other than a convenience suitable as a urinal shall-

(a) be under cover and so partitioned off as to secure privacy; and

(b) have a proper door and fastening.

(3) Urinals shall be so placed or so screened as not to be visible from other places, whether on or off the site.

(4) The sanitary conveniences shall be so arranged as to be convenient accessible to the persons employed at all times while they are at the site.

Safe access to
facilities

38.-(1) Employer shall provide and maintain safe means of access and egress to and from any of the facilities provided in pursuance of these Rules.

(2) Every place or facility provided under this rule, shall be made and kept safe for persons using those facilities.

First aid
equipment

39.-(1) First aid services shall be made available by the contractor for every employee in a work site.

(2) The contractor shall provide and keep clean and in good repair a sufficient number of suitable first aid boxes, or cases, which shall, while work is going on, be reasonably accessible to all positions on the site where persons in his employment are working.

(3) A first-aid box or case provided in pursuance of this rule shall be distinctively marked "FIRST AID" and placed under the charge of a responsible person who shall be readily available while persons are working on the site.

(4) Nothing except appliances or requisites for first aid shall be kept in a first aid box or case.

(5) Each first-aid box or case provided under this Part shall contain the equipment and materials specified in the First Schedule of the Occupational safety and health (First aid and Welfare facilities) Rules, 2013 for contents of first-aid boxes and cases.

(6) In a site where means of telephonic or radio communication with an ambulance station are not readily accessible, the contractor shall provide at or in the immediate vicinity of the site, so as to be readily available during working hours, a motor vehicle constructed or adapted so as to be able to carry a person on a stretcher.

First aid rooms

40. On a site where the number of persons employed exceeds two hundred and fifty, a contractor shall provide and maintain in a good order and in a clean condition at or near the site of the operations or works and conveniently accessible, a properly constructed and suitable first-aid room, which shall be-

- (a) used only for purpose of treatment and rest; and
- (b) in the charge of a person who shall always be readily available during working hours.

First aiders

41.-(1) The contractor shall provide, or ensure that there is provided, such number of suitable persons as is adequate and appropriate in the circumstances for rendering first aid to his employees if they are injured or become ill at work.

- (2) For the purpose of sub-rule (1) a person shall not be

suitable unless he has undergone-

- (a) training and has such qualifications as the chief inspector may approve in respect of that case or that class of a case; and
- (b) additional training, if any, as may be appropriate in the circumstances of that case.

PART VII KEEPING OF RECORDS

Reports and
certificates

42.-(1) The reports required by rules 86, 95, 104 and 106 shall be kept-

- (a) on the site of the operation or works; and
- (b) at the office of the contractor or employer for whom the inspection, test or examination, as the case may be, was carried out, when there are no relevant operations at works.

(2) In case of a site where the contractor or employer has reasonable grounds for believing that the operations or works will be completed in a period of less than thirty days, the contractor or employer may keep the reports required by rule 86 at the office.

(3) All other reports and every certificate or other document required for the purpose of these Rules shall be kept-

- (a) on the site of the relevant operations or works; or
- (b) at an office of the contractor or employer for whom the report was made or the certificate or document was obtained or of the owner of the plant or equipment to which the certificate relate.

(4) All reports, certificates and other documents

required for the purposes of these Rules shall at all reasonable times be open to inspection by any inspector.

(5) Any person keeping any report, certificate or other document specified under rule (3) or extracts there from or copies thereof shall send to any inspector as the inspector may from time to time require for the purpose of execution of his duties under the Act.

PART VIII SAFETY IN VEHICLES

Competent
persons to drive
vehicles

43. A vehicle, power-driven capstan or haulage winch to which rule 33 applies-

- (a) shall be driven or operated by a trained and competent person who has attained the age of eighteen;
- (b) for the purpose of training, it shall be permissible for a such capstan or haulage winch or any such vehicle to be driven or operated by a person under eighteen years of age who is under the direct supervision of a person qualified for that purpose

Mechanical
propelled
vehicles and
trailers

44.-(1) A mechanically propelled vehicle or mechanically drawn trailer- vehicle if owned or used by, or hired by and operated under the control of, a contractor or employer undertaking operations or works to which these Rules applies and used for conveying worker, goods or materials for the purpose of such operations or works shall, when moved at a site where such operations or works are carried on, whether or not worker, goods or materials are actually being conveyed on the vehicle at the time shall-

- (a) be in an efficient state, efficient working order and

in good repair;

(b) not to be used in an improper manner;

(c) not to be loaded in such a manner or to such extent as to interfere with the safe driving or operation of the vehicle.

(2) Where all practicable precautions are taken to avoid danger to any person affected, the provision of paragraph (1)(a) shall not apply to a vehicle which has broken down or been damaged on the site-

(a) on which no worker, goods or materials are conveyed and which is moved only for the purpose of its repair or disposal or so as not to cause an obstruction; or

(b) on which no worker is conveyed and which is being moved only so far as is necessary to render unloading of goods or materials practicable.

Riding in
insecure
positions on
vehicles

45. A person shall not ride on the buffer, running board or other insecure positions-

(a) on any vehicle to which rule 33 applies; or

(b) on a truck or wagon other than at the place provided for that purpose.

Remaining on
vehicles during
loading

46. A person shall remain on any vehicle to which rule 44 applies or on any truck or wagon during the loading of loose material by means of a grab, excavator or 'similar appliance, if he risks danger or harm.

Vehicles near

47. Where any vehicle is used for tipping material into

edge of
excavation

any excavation or pit or over the edge of any embankment or earthwork, adequate measures shall be taken where necessary so as to prevent such vehicle from overrunning the edge of such excavation, pit, embankment or earthwork.

PART IX WORKING PLATFORMS

General
provision

48.-(1) Without prejudice to the rest of this Part-

- (a) there shall be so far as is reasonably practicable, suitable, and sufficient safe and properly maintained access to and egress from every place at which a person at any time works;
- (b) every place at which a person at any time works shall so far as is reasonably practicable, be made and kept safe for a person working in that place; and
- (c) shall be properly maintained scaffolds or, where appropriate, ladders or other means of support which shall be sufficient and suitable for the purpose and shall be, placed and kept in position for use where work cannot be safely done on or from the ground or from part of a building or other permanent structure.

(2) A contractor shall ensure that all scaffold work operations are carried out under the supervision of a competent person who has been appointed in writing by him.

Supervision of
work and
inspection of
material

49.-(1) No scaffold shall be erected or be substantially added to, or altered or be dismantled, except under the immediate supervision of the safety supervisor appointed under rule 5 and so far as possible by a competent workers possessing adequate experience of that work.

(2) All material for a scaffold shall be inspected by the safety supervisor on each occasion before being taken into use.

Construction
and material

50.-(1) Every scaffold and every part thereof shall be of good construction, of suitable and sound material, and of adequate strength for the purpose for which it is used.

(2) Sufficient material shall be provided for and shall be used in the construction of scaffolds.

(3) Timber used for scaffolds shall be of suitable quality, be in good condition, and have the bark completely stripped off.

(4) Timber used for scaffolds, trestles, ladders, and scaffolding step ladders, shall not be painted or treated so that defects cannot easily be seen.

(5) Metal parts used for scaffolds shall be of suitable quality, be in good condition and free from corrosion or other patent defect material likely to affect their strength.

Defective
material

51.-(1) A rope bond which is defective through contact with acid or other corrosive substances; or for any other reason, shall not be used in a scaffold.

(2) All materials for, and parts of, a scaffold shall, when not in use, be kept under good condition and apart from materials or parts unsuitable for scaffolds.

Maintenance of
scaffold

52. Scaffold shall be properly maintained and every part of a scaffold shall be kept so fixed, secured, or placed in position so as to prevent, so far as is practicable, accidental displacement.

Partly erected
or partly
dismantled
scaffold

53. No partly erected or partly dismantled scaffold or part of a scaffold shall be used unless it is so erected or dismantled in compliance with these Rules as to safety, and a prominent warning notice prohibiting use of and access to a partly erected or partly dismantled scaffold, shall be fixed on or at any point of access to the scaffold.

Standards or
uprights edgers
and putlogs

54.-(1) Standards or uprights of scaffold shall -

(a) where practicable be either vertical or slightly inclined towards the building or other structure; and

(b) be fixed sufficiently close together to secure the stability of the scaffold having regards to all the circumstances.

(2) The foot or base of a standard or upright shall be placed on an adequate base plate to prevent slipping or sinking, or its displacement shall be prevented in some other sufficient way.

(3) Ledgers shall be as nearly as possible horizontal and shall be securely fastened to the standards or uprights by efficient means.

(4) Putlogs or other supports on which a platform rests shall be securely fastened to the standards or uprights, or other movement shall be prevented by other efficient means, and where one end of a putlog is supported by wall, that end shall extend into or on to the wall sufficiently to provide a supporting surface of sufficient area.

(5) The distance between two consecutive putlogs and other supports on which a platform rests shall be fixed with due regard to the anticipated load and the nature of the platform flooring, and the distance with single planking shall not, in general exceed 1.0 m with planks of 32mm, thickness 1.5m with planks of thickness or 2.6m with planks of 50mm thickness.

Ladders used in
scaffolds

55.-(1) Ladders serving as upright or scaffolds shall-

- (a) be of adequate strength;
- (b) be placed so that the two stiles or sides of each ladder are evenly supported or suspended; and
- (c) be secured to prevent slipping.

(2) Ladder-scaffolds shall be used only if the work is of such a light nature and the materials required for the work is of a type that enables the use of scaffold safely.

Stability of
scaffolds

56.-(1) Every scaffold shall be-

- (a) securely supported or suspended;
- (b) where necessary, be sufficiently and properly struted or braced to prevent collapse; and
- (c) rigidly connected with the building or other structure unless the scaffold is so designed and constructed as to ensure stability without the connection.

(2) Every structure and appliance used as a support for scaffold shall be-

- (a) of sound construction;
- (b) have a firm footing or be firmly supported; and
- (c) where necessary, be sufficiently and properly struted or braced so as to prevent collapse and to ensure stability.

(3) A scaffold other than suspended scaffold which can be moved on wheels or skids or slung scaffold shall-

- (a) be constructed with due regard to stability and, if necessary for stability, be adequately, weighted at the base;

- (b) be used only on a firm and even surface not so sloping as to involve risk of instability of the scaffold or any load thereon;
- (c) be adequately secured to prevent movement when any person is working upon it or any ladder or other plant or equipment, being a ladder; plant or equipment which is supported by the scaffold; and
- (d) be moved only by the application of force at or near the base.

Slung scaffolds

57.-(1) Chain, wire rope lifting gear, metal tube, or other means of suspension for slung scaffolds shall not be used unless -

- (a) it is suitable and of adequate strength for the purpose for which it is used;
- (b) it is properly and securely fastened to safe anchorage points to the scaffold ledgers or other main supporting members;
- (c) it is so placed as to endure stability of the scaffolds;
- (d) it is as nearly vertical as is reasonably practicable; and
- (e) it is kept *taut*.

(2) No rope other than a wire rope shall not be used for the suspension of a slung scaffold.

(3) Where chain or wire rope is used for the suspension of a slung scaffold, steps shall be taken to prevent the chains or wire ropes coming into contact at points of suspension with edges where this would cause danger.

(4) A slung scaffold shall be secured to prevent undue horizontal movement while it is used as a working platform.

Cantilever jib,
figure and
bracket fold

58.-(1) Cantilever scaffold or jib scaffold shall not be used unless it is adequately supported, fixed and anchored, and shall have out-riggers of adequate length and strength, and it is, where necessary, sufficiently and properly strutted or braced to ensure rigidity and stability.

(2) Figure scaffold or bracket scaffold supported or held by dogs, spikes or similar fixings liable to pull out of the stonework, brickwork or other surface in which they are gripped or fixed shall not be used.

Support for
scaffolds etc

59.-(1) No part of a building or other structure shall be used as support for a scaffold, ladder, folding stepladder or crawling ladder, or for part thereof, unless the part of the building or other structure is of sound material and sufficiently stable and of sufficient strength to afford safe support.

(2) No gutters shall be used as supports unless they and their fixings are suitable and are of adequate strength and, in the case of overhanging eaves, gutters shall not be so used unless in addition they have been specially designed as walkways.

Suspended
scaffolds (not
power
operated)

60.-(1) In addition to the , requirements under Part XI, the following requirements shall be observed in respect of-

- (a) every suspended scaffold; and
- (b) plant or equipment which is permanent plant or equipment of a building and which, but for the fact that it is permanently provided, would be a suspended scaffold,
 - (i) being in any case a suspended scaffold, plant or equipment which is not raised or lowered;
 - (ii) by a power-driven lifting appliances; and no

such suspended scaffold, plant or equipment shall be used unless it complies with the requirements of this rule.

(2) In the application of paragraph (3) of this rule reference to suspended scaffolds shall be construed as reference to suspended scaffolds to which this rule applies and shall include references to plant or equipment of the kind referred to in paragraph (1) (b).

(3) Every suspended scaffold shall be provided with adequate and suitable chains or ropes and winches or other lifting appliances or similar devices and shall be suspended from suitable out-riggers, joists, runways, rail-tracks or other equally safe anchorage.

(4) The winches or other lifting appliances or similar devices of a suspended scaffold shall be-

- (a) provided with a brake or similar device which comes into operation when the operating handle or lever is released; and
- (b) adequately protected against the effects of weather, dust or material likely to cause damage.

(5) The outriggers for a suspended scaffold shall be of adequate length and strength and properly installed and supported and, subject to paragraph (17) of this rule shall be-

- (a) installed horizontally and provided with adequate stops at their outer ends;
- (b) properly spaced having regard to the construction of the scaffold and of the runway, joist or rail track on which the scaffold is carried.

(6) Where counterweights are used without riggers, the counterweights shall be securely attached to the outriggers and shall not be less in weight than three times the weight which would counterbalance the weight suspended from the outrigger including the weight of the runway, joist or rail-track, the

suspended scaffold and persons and other load thereon.

(7) The points of suspension of every suspended scaffold shall be an adequate horizontal distance from the face of the building or other structure.

(8) Runway, joist and rail-track supporting a suspended scaffold shall be-

- (a) of suitable and sound material;
- (b) of adequate strength for the purpose for which it is used;
- (c) free from patent defect;
- (d) provided with adequate stops at each end; and
- (e) properly secured to the building or other structure or, where outriggers are used, to the outriggers.

(9) The suspension ropes or chains of a suspended scaffold shall be securely attached to the outriggers or other supports and to the platform framework or to any lifting appliance or other device attached thereto, as the case may be, and shall be kept in tension.

(10) Where winches are used with suspended scaffolds the suspension ropes shall be such that at the lowest position at which the scaffold is intended to be used there are not less than two turns of rope remaining on each winch drum and the length of each rope shall be clearly marked on its winch.

(11) Every part of a suspended scaffold and all plant and equipment used for the purpose thereof shall-

- (a) be of good construction, suitable and sound material, of adequate strength for the purpose for which it is used;
- (b) be properly maintained; and
- (c) where constructed of metal, be free from corrosion

and other patent defects, being corrosion and defects likely materially to affect its strength.

(12) Adequate arrangements shall be made to prevent undue tipping, tilting or swinging of a suspended scaffold and to secure it to prevent undue horizontal movement while it is being used as a working platform

(13) No rope other than a wire rope shall be used for the raising, lowering and suspension of a suspended scaffold, except that the raising, lowering and suspension may be carried out by means of fiber ropes and pulley blocks in the case of works to which paragraph (17) applies.

(14) The platform of every suspended scaffold shall-

- (a) except to the extent necessary for drainage, be closely boarded, planked, or plated; and
- (b) subject to paragraph (17), be of adequate width to afford adequate working space at every working point and shall, in any event-
 - (i) be at least 600mm wide if used as a footing only and not for the deposit of material;
 - (ii) be at least 800mm wide if used for the deposit of material; and
 - (iii) not be used for the support of any higher scaffold.

(15) The platform of every suspended scaffold shall be so arranged or secured that at each working position the space between the face of the building or other structure and the platform is as small as reasonably practicable, in a manner that where workers sit at the edge of the platform to work there may be-

- (a) a space not exceeding 300mm; and,
- (b) where necessary, a device shall be provided and used to keep the platform at a sufficient distance

from the wall when persons have to work in a sitting position.

(16) If a suspended scaffold is carried on fibre ropes and pulley blocks, the ropes shall be spaced not more than 3.2m apart.

(17) Where the work to be carried out from a suspended scaffold is of such a light nature and the material required for the work is such that a cradle or similar lightweight suspended scaffold is used, paragraph (5) and 14(b) shall not apply.

Boatswains
"chair, cages
and skips (not
power
operated)

61.-(1) No boatswain's chair, cage, skip or similar plant or equipment, which is not raised or lowered by a power-driven lifting appliance, shall be used unless-

- (a) it is of good construction, suitable and sound material, adequate strength, free from patent defect, and properly maintained;
- (b) the outriggers or other supports are of adequate strength and properly installed and supported;
- (c) the chains, ropes, lifting gear or other means of suspension used therewith, in addition to satisfying the requirements of Part XI, are securely attached to the outriggers or other supports and to the chair, cage, skip or other similar plant or equipment or to any lifting appliance or other device attached thereto, as the case may be;
- (d) suitable means are provided to prevent any occupant from falling out;
- (e) it is free of any material or article liable to interfere with occupant's handhold or foothold or otherwise endanger him;
- (f) suitable measures are taken to prevent spinning or

tipping in a manner dangerous to any occupant;

- (g) in the case of a skip or other receptacle it is at least 1.0, deep; and
- (h) its installation has been, and its use is, supervised by a competent person.

(2) No boatswain's chair, cage, skip or similar plant or equipment, not being a boatswain's chair, cage, skip or similar plant or equipment which is raised or lowered by a power-driven lifting appliance, shall be used as a working place in circumstances in which a suspended scaffold could be used unless-

- (a) the work is of such short duration that the use of a suspended scaffold would be unreasonable; or
- (b) the use of a suspended scaffold is not reasonably practicable

Trestle scaffolds

62.-(1) All trestles and supports used for construction of any trestle scaffold shall be of good construction, suitable and sound material, adequate strength for the purposes for which they are used and free from patent defect and shall be properly maintained.

(2) A trestle scaffold shall not be used-

- (a) if, the scaffold is so situated that a person may fall from its working platform in a distance of more than 4.5m; or
- (b) if constructed with more than one tier where folding supports are used.

(3) No trestle scaffold shall be erected on a scaffold platform unless-

- (a) the width of the platform leaves sufficient, clear space for the transport of materials along the

platform;

- (b) the trestle or supports are firmly attached to the platform and adequately braced to prevent displacement.

Inspection of
scaffolds,
boatswains'
chairs etc

63.-(1) Subject to the provisions of this rule-

- (a) no scaffold, including any boatswain's chair, cage, skip or similar plant or equipment; and
- (b) no plant or equipment used for the purposes of any of the foregoing shall be used unless, in addition to satisfying the requirements of Part XI-
 - (i) it has been inspected by the safety supervisor before being put into use and, in any case, within the immediately preceding seven days;
 - (ii) it has been inspected by the safety supervisor since exposure to weather conditions likely to have affected its strength and stability or to have displaced any part;
 - (iii) a report has been made of the result of every such inspection in the form set out in the First Schedule containing the particulars specified therein and signed by the inspector making the inspection:

(2) Sub-paragraph (a) shall not apply in the case of a scaffold from no part of which has been erected for more than seven days.

(3) Subparagraph (c) shall not apply to a ladder scaffold, a trestle scaffold or a scaffold which a person may fall in a distance of more than 2.0m.

(4) In the case of a site where the employer for whom the inspection was carried out has reasonable ground for

believing that the operation or works will be completed in a period of less than thirty days, the provisions of this rule requiring that a report shall have been made and signed, shall be deemed to have been satisfied-

- (a) if the person in charge of the operations or works carried on by that employer at that site has himself carried out the inspection and is a competent person;
- (b) if, within one week of the date of the inspection the person reports to his employer in writing that the scaffold, boatswain's chair, cage skip or similar plant and equipment, used for the purpose of any of the foregoing, was inspected by him and that he found it in good order or observed certain defects; and
- (c) the date of the inspection and the results thereof, together with the name of the person making the inspection are entered by the employer in the prescribed form, together with the relevant particulars.

Scaffold used
by workmen of
different
employers

64. Where a scaffold or part of a scaffold is to be used by or on behalf of an employer other than the employer for whose workmen it was first erected, the employer or his safety supervisor shall; before the use, and without prejudice to any other obligations imposed upon him by these Rules, take express steps to satisfy himself that-

- (a) the scaffold or part thereof is stable;
- (b) the material used in its construction are sound; and
- (c) the safeguards required by these Rules are in position.

Construction of
working

65.-(1) Subject to the provisions of paragraph (2) every

platforms,
gangways and
runs

working platform, gangway, and run from any part of which a person may fall from a distance of more than 2.0m shall be closely boarded, planked or plated.

(2) The provisions of paragraph (1) shall not apply to-

- (a) a platform, gangway or run consisting of open metal work having interstices which does not exceed 4,000 square millimeters in area, if there is no risk of persons below any such platform, gangway, or run being struck by materials or articles falling through the platform, gangway or run; or
- (b) a platform, gangway or run, the boards, planks or plates of which are so secured as to prevent their moving and so placed that the space between adjacent boards, planks or plates does not exceed 25mm, if there is no risk of the persons below any such platform, gangway or run being struck by materials or articles falling through the platform.

(3) A gangway or run, shall not be used to the slope of which exceeds one vertical to one and a half horizontal.

(4) Where the slope of a gangway or run renders additional foothold necessary and in every case if the slope is more than one vertical to four horizontal there shall be provided proper stepping laths which shall-

- (a) be placed at suitable intervals; and
- (b) be the full width of the gangway or run, except that where necessary they may be interrupted over widths of not more than 100mm to facilitate the movement of barrows.

Boards and
planks in
working
platform

66. Every board or plank forming part of a working platform, gangway or run shall be-

(a) of a thickness which is such as to afford adequate security having regard to the distance between the putlogs or other supports;

(b) not less than 200mm wide or, in the case of boards or planks exceeding 50mm in thickness, not less than 150 mm wide.

(2) A board or plank which forms part of a working platform, gangway or run shall not project beyond its end support to a distance-

(a) exceeding four times the thickness of the board or plank unless it is effectively secured to prevent tipping; or

(b) which, having regard to the thickness and strength of the board or plank, renders the projecting part unsafe support for any weight that may be placed upon it.

(3) Suitable measures shall be taken either by the provision of adequate bevelled pieces or otherwise to reduce to a minimum the risk of tripping and to facilitate the movement of barrows where boards or planks which form part of a working platform, gangway or run-

(a) overlap each other;

(b) are not of reasonably uniform thickness where they meet each other; or

(c) owing to warping or for some other reason do not provide a reasonably even surface.

(4) The provisions of paragraph (3) shall not apply to a working platform, gangway or run one side of which is contiguous to a curved surface of a cylindrical or spherical structure forming part of a work of engineering construction.

(5) Every board or plank which forms part of a working platform, gangway or run shall-

(a) rest securely and evenly on its supports; and

- (b) need at least three supports unless, taking into account the distance between the supports and the thickness of the board or plank undue or unequal sagging can be prevented.

(6) Where work has to be done at the end of a wall or working face the working platform at that wall or face shall, wherever practicable, extend at least 600mm beyond the end of the wall or face.

Width of
working
platform

67.-(1) Subject to paragraph (2) and (4) of this rule, every working platform (other than working platforms of suspended scaffolds and working platforms referred to in rule 58(7) (c) and 66), from which a person is liable to fall a distance of more than 2.0m, shall-

- (a) if used as footing only and not for the deposit of material, be at least 600mm wide;
- (b) if used for the deposit of material, be at least 800mm wide and have a clear passage way between one side of the working platform and the deposited material adequate in width for the passage of persons being a passage way which is in any case at least 430mm wide;
- (c) if used for the passage of materials, afford a clear passage of not less than 600mm wide which is adequate in width for the passage of the materials without removal of the guardrails and toe boards;
- (d) if used for the support of any higher platform be at least 1.05 m wide;
- (e) if used to dress or roughly shape stone be at least 1.3m wide;
- (f) if used for the support of any higher platform and is one upon which stone is dressed or roughly shaped, be at least 1.5m wide; and

(g) in every case be of sufficient width to afford adequate working space at every part.

(2) Subject to paragraph (4) of this rule, the following platforms to which this rule applies shall not be less than 430mm wide, being-

(a) a platform -

(i) of a ladder scaffold;

(ii) supported directly by folding trestles or folding step-ladders;

(iii) supported or suspended from roof members or the roof under a roof and used for work on or in the vicinity of the roof on which the work is light and of short duration in any one position and the provisions of paragraph (1) (a) and (b) can be dispensed with safety; and

(b) a platform which is used for work in connection with cylindrical or spherical metal structures.

(3) Where work at the face of a building or other structure is done from a working platform to which this rule applies the space between the face and the working platform shall be as small as practicable, so however, that where workmen sit at the edge of the platform to work, there may be a space not exceeding 300mm.

(4) The provisions of paragraph (1) and (2) as to width shall not apply to a working platform to which this rule applies where it is impracticable by reason of limitation of space to provide a platform of the width required by those paragraphs, but the platform shall in any case be as wide as is reasonably practicable.

Width of
gangways and
runs

68.-(1) Subject to paragraph (2) every gangway and a run from any part of which a person is liable to fall a distance

of more than 2.0m shall-

- (a) if used for the passage of persons only, be at least 430mm wide;
- (b) if used for the passage of materials, be adequate in width for passage of materials and in any case be not less than 600mm wide.

(2) The provisions of paragraph shall not apply to gangway or run where it is impracticable by reason of limitations of space to provide a gangway or run of the width required by those provisions, but the gangway or run shall in any case be as wide as is reasonably practicable.

Guardrails and
toe boards at
working
platforms and
places

69.-(1) Every side of a working platform or working place being a side from which a person is liable to fall a distance of more than 2.0m, shall, subject to paragraphs (4) to (7) and except provided in paragraph (8) be provided-

- (a) with a suitable guardrail of adequate to a between 910mm and 1.15m above the platform or working place and above any raised standing place in the platform or working place; and
- (b) with toe boards, or other barriers up to a sufficient height which shall in no case be less than 150mm unless provision thereof is impracticable on account of the nature of the work.

(2) A guardrail, toe board, or barrier provided under the provisions of this rule shall be so placed as to prevent so far as possible the fall of persons, materials or articles from a working platform or working place.

(3) Without prejudice to the provisions of rule 52, the outward movement of guardrails and toe boards or barriers shall, unless they are so designed and used as to prevent that movement, be prevented placing them on the inside of an upright or by other equally effective means.

(4) Where guardrails are required to be provided, the distance between any toe board or other barrier and the lowest guardrail above it, shall not exceed 700mm.

(5) Guardrail, toe boards and barriers required by paragraph (1) may be removed or remain un-erected for the time and to the extent necessary for-

- (a) the access of persons; or
- (b) the movement of materials; or
- (c) for other purposes incidental to the work,

but guardrails, toe boards and barriers removed or remaining un-erected for any of these purposes shall be replaced or erected as soon as practicable.

(6) On the side of a suspended scaffold next to the wall or working face-

- (a) the guardrails required by this rule, need not extended to a height of more than 700mm above the platform if the work is impracticable with a guardrail at a greater height; and
- (b) the guardrails and toe boards or other barriers shall not be required if the workers sit at the edge of the platform to work and ropes or chains affording the workers a safe and secure handhold, are provided.

(7) None of the requirement of paragraph (1), (2) and (3) shall apply to-

- (a) the platform of a ladder scaffold if a secure handhold is provided a the full length of the platform;
- (b) the platform of a trestle scaffold when the platform is supported on trestles, split heads or similar devices or folding step-ladders;
- (c) a platform which is used only in the course of

erecting any framework or prefabricated unit forming part of a building or other permanent structure for the purpose of joining part of a building or other permanent structure for the purpose of joining, bolting-up, reverting or welding work and which is for such a short period as to make the provision of guardrails and toe boards or barriers unreasonable if-

- (i) the platform is at least 800mm wide;
 - (ii) there is adequate handhold; and
 - (iii) the platform is not used for the deposit of materials or articles otherwise than in boxes or receptacles suitable to prevent the fall of the materials or articles from the platform;
- (d) a temporary platform passing between two adjacent glazing bars of a roof with a sloping surface if those bars or the roof framework afford secure handhold along the full length of the platform but toe-boards or barriers shall be provided in accordance with paragraph (1), (2) and (3), unless the provision of toe-boards or barriers is impracticable on account of the nature or circumstance of the work;
- (e) a platform under a roof being a platform which is supported by, or suspended from, roof members or the roof and which is used only for work on or in the vicinity of the roof and of a light nature and of such short duration as to make the provision of guardrails and toe-boards or barriers unreasonable if-
- (i) there is adequate handhold at every working position; and
 - (ii) the material required for the work is such that the platform can be used with safety
- (f) a working platform or working place one side of

which is continuous to the concave surface of a cylindrical or spherical structure so long as steps are being taken to prevent persons working thereon from falling a distance of more than 2.0m

(8) Except as provided in rule 77, the provisions of this rule shall not apply to working platforms and working places being working platforms and working places to which that rule applies.

Guardrails etc,
for gangways
60, runs and
stairs

70.-(1) Except for the time and to the extent necessary for the access of persons or the movement of materials, stairs shall be provided throughout their length with handrails or other efficient means to prevent-

- (a) the fall of persons; and
- (b) where necessary, to prevent danger to any person, the handrails or other means shall be continued beyond the end of the stairs.

(2) Every side of any gangway, run or stairs from which a person is liable to fall a distance of more than 2.0m shall be provided-

- (a) with a suitable guardrail or guardrails of adequate strength to a height of between 910mm and 1.15m above the gangway, run or stairs; and
- (b) except in the case of stairs, and subject to paragraph (3), with toe-boards or other barriers up to a sufficient height which shall in no case be less than 150mm and which shall be so placed as to prevent, as far as possible, the fall of persons, materials and articles; and the space between any such toe-boards or barriers and the lowest guardrail above it, shall not exceed 700mm.

(3) The provision of paragraph (2) shall not apply to a temporary gangway which is used only in the course of erecting

framework forming part of a building or of other permanent structure designed for work of such short duration as to make the provision of a gangway with guardrails and toe-boards or other barriers, unreasonable.

(4) Guardrails, toe-boards and barriers required by paragraph (2) may be removed or remain un-erected for the time and to the extent necessary-

- (a) for the access of persons; or
- (b) the movement of material; or
- (c) other purposes of the work,

but guardrails, toe-boards and barriers removed or remaining un-erected for any of these purposes shall be replaced or erected as soon as practicable.

Platforms,
gangways, runs
and stairs, etc
to afford safe
foothold

71.-(1) If a platform, gangway, run or stair becomes slippery, appropriate steps shall as soon as reasonably practicable, be taken by way of cleaning or some other means to remedy the dangerous condition.

(2) Every platform, gangway, run or stair shall be kept free from unnecessary obstruction and material and free from rubbish and projecting nails.

Construction
and
maintenance of
ladders and
folding step
ladders

72.-(1) Every ladder and folding step-ladder shall be of good construction, of suitable and sound material, and of adequate strength for the purpose of which it is used and shall be properly maintained.

(2) A contractor shall not use a ladder in which a rung is missing or is defective.

(3) Every rung of a ladder shall be properly fixed to the stiles or sides. (4) No ladder shall be used in which any rung depends for its support solely on nails, spikes or other similar

fixing.

(5) Where in the case of a wooden ladder the tenon joints are not secured by wedges, reinforcing ties shall be used.

(6) Wooden stiles or sides and wooden rungs of ladders shall have all the grain running lengthwise.

(7) The requirements of paragraph (3), (4), (5) and (6) of this rule shall not apply to ladders for which rule 66 applies.

Use of ladders
and folding
stepladders

73.-(1) The requirements of this rule shall apply to folding step-ladders being ladders and folding step-ladders which afford a means of access, egress, communication or support to a person or persons employed, but not to any ladder lying upon a roof or to a crawling board of crawling ladder.

(2) Subject to the provisions of paragraph (3), no ladder standing on a base shall be used unless-

- (a) it is securely fixed near to its upper resting place, or in the case of a vertical ladder, near to its upper end, and where the fixing is impracticable the ladder shall be securely fixed at or near to its lower end;
- (b) a person is stationed at the foot of the when it is in use and is holding it to prevent it from slipping where it is impracticable to fix it in accordance with sub-paragraph (a);
- (c) it has a level and firm footing and is not standing on loose bricks or other loose packing;
- (d) it is secured where necessary to prevent undue swaying or sagging; and
- (e) it is equally and properly supported on each stile or side

(3) Paragraph (2) shall not apply to a ladder which is not more than 3.0m in length and which is not used as a means of

communication, if the ladder is securely placed so as to prevent it from slipping or falling.

(4) No ladder shall be used unless-

(a) it extends to a height of at least 1.0m above the place of landing or the highest rung to be reached by the feet of any person using the ladder, as the case may be, or, if this is impracticable, to the greatest practicable height; or

(b) there is other adequate handhold; and

(c) there is sufficient space at each rung to provide adequate foothold.

(5) Every ladder, other than a ladder to which paragraph (2) applies, shall, before being used be-

(a) securely suspended;

(b) secured where necessary to prevent undue swinging or swaying; and

(c) equally and properly suspended by each stile or side.

(6) No folding step-ladder shall be used unless it has a level and firm footing or while it is standing on loose bricks or other loose packing

(7) No ladder or run of ladders rising a vertical distance of over 9.0m shall be used unless it is, if practicable, provided with an intermediate landing place or intermediate landing places so that the vertical distance between any two successive landing places shall not exceed 9.0m.

(8) Every landing place shall be of adequate dimensions and, if person is liable to fall there from a distance of more than 2.0m, shall, be provided with-

(a) sufficient and suitable guardrails to a height of between 910mm and 1.15m above the landing place; and

- (b) toe-boards or other barriers up to a sufficient height which shall in no case be less than 150mm,

so placed as to prevent as far as possible the fall of person, materials and articles and so that the space between any toe-board or other barrier and the lowest guardrail above it shall not exceed 700mm.

(9) Where any ladder passes through an opening in the floor of landing place, the opening shall be as small as is reasonably practicable.

Openings,
corners, breaks,
edges and open
joists

74.-(1) Paragraphs (2) and (3) of this rule, shall apply to every opening, corner, break or edge-

- (a) in or of roof, other than a roof to which rule 77 applies, floor, wall or other similar part of a building or of any other structure whether the floor, roof, wall or other similar part is complete or only partly complete or is in course of construction, maintenance, repair or demolition;
- (b) in or of a working platform gangway or run, being an opening, corner, break or edge which a person is liable to pass.

(2) Subject to rule 77 in the case of an opening, corner, break or edge through or from which a person is liable to fall a distance of more than 2.0m or to fall into any liquid or material so as to involve risk of drowning or serious injury, there shall be provided either-

- (a) suitable guardrail or guardrails of adequate strength to height of between 910mm and 1.15m above the space across which persons are liable to pass; and toe-boards or other barriers up to a sufficient height which shall in no case be less than 150mm and so placed as to prevent as far as possible the fall of person, materials and articles with the space between a toe

board or other barrier and the lowest guardrail above it not exceeding 700mm; or

- (b) a covering so constructed as to prevent the fall of person, materials and articles, which covering shall be clearly and boldly marked to show its purpose and be securely fixed in position.

(3) Subject to rule 77, in the case of an opening, corner, break or edge, not being an opening, corner, break or edge to which paragraph (2) applies through or from which materials or articles are liable to fall so as to endanger persons employed, suitable precautions by way of the erection of toe-boards, secure covering or otherwise shall be taken to prevent materials and articles so falling.

(4) Subject to rule 69, when work is done on or immediately above an open joisting through which a person is liable to fall a distance of more than 2.0m, the joisting shall be securely covered by boards or other temporary covering to the extent necessary to afford safe access to or foothold for the work, or other effective measures shall be taken to prevent persons from falling.

Exceptions to
rule 55

75.-(1) Guardrails, toe-boards, and covering required by rule 74 may be removed or remain un-erected-

- (a) where and when this is necessary in order to proceed with any permanent filling in, covering or enclosure; or
- (b) for the time necessary for the access of persons or the movement of materials or other purposes of the work, but guardrails, toe-boards, barriers and coverings removed or remaining un-erected for any of these purposes shall be replaced or erected as soon as practicable.

(2) The provisions of rule 69 and 74 shall not apply to-

- (a) an opening, corner, break or edge created in the course of demolition operation to which rule 144 applies; or
- (b) an opening corner break or edge created in the course of any other demolition operation, if in the course of the last mentioned demolition operation the opening, corner, break or edge is not left unattended.

Work on roofs

76.-(1) Roof covering and any other works on a roof shall be undertaken with necessary precautions to avoid fall of persons and fall of material.

(2) If there occurs any weather condition that brings hazards for accidents, particular care shall be taken and, if needed, the work shall be interrupted.

Sloping roofs

77.-(1) In this rule “sloping roof” means a roof or part of a roof being a roof or part of a roof having a pitch of more than ten degrees which covered either wholly or partly and which-

- (a) is in the course of construction, maintenance, repair, or demolition; or
- (b) is used as a means of access to or egress from building operations or works of engineering construction on a roof or part of roof

(2) Except as provided in paragraphs (6) and (7) of this rule, where a sloping roof has-

- (a) a pitch of more than thirty degrees; or
- (b) a pitch of thirty degrees or less and a surface on or from which a person is, by reason of the nature or condition of the surface of weather, liable slip or fall to such an extent that he is liable to fall from the

edge of the roof, work thereon or there from shall only be carried out by workers who are suitable for that and the requirements of paragraphs (3) and (4) of this rule, shall be complied with.

(3) Where a sloping roof is used as a means of access to or egress from budding operations or work of engineering construction on a roof or part of a roof, sufficient and suitable crawling ladders or crawling boards shall be provided on that sloping roof.

(4) Where any work is done on or from a sloping roof, sufficient and crawling ladders or crawling boards shall be provided on that sloping roof, except where the work is not extensive either-

- (a) a barrier shall be provided at the lower edge of the sloping too, other than the upper surfaces of a tank or similar structure or metal construction, of such a design and so constructed as to prevent a person falling from that edge; or
- (b) the work shall be done from a securely supported working platform not less than 430mm wide which complies with the requirements of paragraph (1) and (5) of rule 39.

(5) Crawling ladders and crawling boards provided in pursuance of paragraph (3) or (4) of this rule, shall be-

- (a) of good construction, suitable and sound material, adequate strength for the purpose for which they are used, free from patent defect and properly maintained;
- (b) properly supported; and
- (c) securely fixed or anchored to the slopping surface or over the roof ridge or securely fixed in some other effective way, so as, in every case, to prevent slipping.

(6) Crawling ladders or crawling boards shall not be required in case of a sloping roof where the handhold and foothold afforded by the battens or other similar members of the structure are such that the sloping roof is as safe for every person thereon as it would be if crawling ladders or crawling boards were provided.

(7) The requirements of paragraph (4) (a) and (b) of this rule, shall apply only in the case of a sloping roof from, the eaves of which a person is liable to fall a distance of more than 2.0m.

(8) Suitable and sufficient means shall be provided to prevent the fall of materials or articles from a sloping roof.

Working on or
near fragile
materials

78.-(1) Notwithstanding the provisions of rules 74 and 77, no person shall pass across, or work on or from material which would be liable to fracture if his weight were to be applied to it and which is so situated if it were to be so fractured, the person would be liable to fall a distance of more than 2.0m, unless suitable and sufficient ladders or crawling ladders or crawling boards or duck boards, which shall in any case be securely supported and, if necessary, secured so as to prevent their slipping, or other sufficient means as are necessary are provided and so used that the weight of any person passing or working on the material is wholly or mainly supported by the ladders or boards or other means.

(2) Notwithstanding the provisions of rule 49 and 52, no person shall pass or work near material of the kind and situated as specified in paragraph (1) unless suitable guardrail or suitable covering or other suitable means to prevent, so far as reasonably practicable, a person so passing or working from falling through the material, are provided and used.

(3) Where a person passes across or near, or works on or near, materials of the kind and situated as specified in paragraph (1), prominent warning notices shall, except where

the material consists wholly of glass, be affixed at the approaches to the place where the material is situated.

(4) References in this rule to “a person’s weight” shall be construed as references to the aggregate of his own weight and that of anything he may be, for the time being, supporting by his own person.

(5) All plant and equipment provided in pursuance of this rule shall be of good construction, suitable and sound material, adequate strength for the purpose for which it is used, free from patent defect and properly maintained.

Loads on
scaffolds

79.-(1) A scaffold shall not be overloaded and so far as practicable the load thereon shall be evenly distributed,

(2) When material is transferred on or to a scaffold it shall be moved or deposited without imposing a violent shock

(3) Material shall not be kept upon a scaffold unless the material is needed for work within a reasonable time.

Prevention on
falls and
provision of
safety nets and
belts

80.-(1) Where, by reason of the special nature or circumstances of any part of the work or of the access thereto or the egress there from, it is impracticable to comply with all or any of the requirements of rules 48, 65 to 61, 74, 77 and 78, so far as they relate to the falls of persons, the requirements of those rules shall be complied with.

(2) Except as provided in paragraphs (3) and (4), there shall, in addition, where practicable, be provided and so erected and kept in such positions as to be effective to protect persons carrying on any work or operation or using any access or egress, suitable safety nets or safety sheets of such a design and so constructed and installed as to prevent, injury to persons falling on them.

(3) Safety nets or safety sheets provided under this rule

may be removed or remain un-erected for the time and to the extent necessary for the access of persons or the movements of materials or other purposes of the work, but shall be replaced or erected as soon as practicable.

(4) Where, by virtue of paragraph (3) of this rule, safety nets or safety sheets would be required to be provided for the protection of persons carrying on any part of the work or using the access thereto or the egress there from, but the work can be carried on or the access or egress used while making use of safety belts or other suitable equipment attached continuously to suitable and securely fixed anchorage safety nets or safety sheets shall not be required to be provided

(5) Where-

- (a) it is impracticable to provide safety nets or safety sheets as would be required to comply with paragraph (1) and (2)
- (b) it is not practicable to provide all those nets or sheets by reason of the frequent movement of materials or other purposes of work; or
- (c) the work is of such short duration as to make the provision of all nets or sheets unreasonable, any safety nets or safety sheets provided in accordance with the provisions of this rule shall be provided to the extent to which it is reasonably practicable to provide them.

(6) There shall also be provided in those cases specified under paragraph (5) of this rule-

- (a) suitable and sufficient anchorages;
- (b) suitable and sufficient belts; or
- (c) suitable and sufficient equipment with suitable fittings,

being of such a design and so constructed as to prevent serious

injury in the event of a fall to persons using them.

(7) All safety nets, safety sheets, safety belts and other equipment provided in pursuance of this rule shall be properly maintained.

(8) No person shall be permitted to work at a height of more than 2m without the permission of the safety and health supervisor.

PART X FALL PROTECTION

Fall protection

81.- (1) A contractor shall cause-

- (a) preparation of a fall protection plan by a competent person; and
- (b) the fall protection plan under subparagraph (a) to be implemented, amended where necessary, and maintained as required.

(2) The fall protection plan shall include-

- (a) a risk assessment of all work carried out from the elevated position including procedures and methods used to address all identified risks;
- (b) the evaluation of the employees physical and psychological fitness necessary to work at elevated positions;
- (c) the procedures addressing the inspection, testing and maintenance of all fall protection equipment.

(3) Notwithstanding the provisions of paragraphs (1) and (2), the contractor shall ensure that-

- (a) all unprotected openings in floors, edges, slabs, hatchways, and stairways are adequately guarded,

fenced or barricaded or that similar means are used to safeguard any person from falling through such openings;

- (b) no person works in an elevated position, unless such work is performed safely as if working from a scaffold or ladder;
- (c) notices are conspicuously placed at all openings where the possibility exists that a person might fall through such openings;
- (d) fall prevention and fall arrest equipment is-
 - (i) of sufficient strength and securely attached to a structure or plant for the purpose of safely supporting the equipment and any person who is liable to fall; and
 - (ii) suitable and of sufficient strength for the purpose for which it is being used having regard to the work being carried out and the load, including any person, it is intended to bear.
- (e) fall arrest equipment shall only be used where it is not reasonably to use fall prevention equipment;
- (f) in the event of a fall by any person, the fall arrest equipment or the surrounding environment does not cause any injury to the person.

(4) Where roof work is being performed on a construction site, the contractor shall ensure that in addition to the requirements set out in paragraphs (2) and (3), it is furthermore indicated in the fall protection plan that-

- (a) the roof work has been properly planned;
- (b) the roof erectors are competent to carry out the roof work;
- (c) no employee is permitted to work on roofs during

weather conditions that are hazards to the health and safety of the employees;

- (d) covers to openings which are not of sufficient strength to withstand any imposed loads are to be barricaded and have prominent notices placed;
- (e) that suitable and sufficient platforms ,coverings or other similar means of support have been provided;
- (f) that suitable and sufficient guard rails or barriers and toe boards or other similar means of protection to prevent the fall of any person, material or equipment.

(5) Every contractor shall, at any site where material including waste material, scaffold material, tools or other objects and articles are likely to fall or drop or be thrown, take proper and adequate steps to prevent any person whether employed and working at the site or not, from being struck by a material, tool, object or article falling on or within the close cartilage and precinct of the site.

(6) Notwithstanding paragraph (5)-

- (a) any material, including waste material, scaffold material, toots or other objects and articles shall where practicable be properly secured and not be thrown, tipped or shot down from a height where they are liable to cause damage, harm or injury to persons or property; and
- (b) where proper lowering is not practicable and during demolition or breaking off, adequate steps shall be taken to prevent falling or flying debris from causing damage, harm or injury to persons or property.

PART XI LIFTING OPERATIONS

Lifting
machinery in
workplaces and
in docks etc

82.-(1) Lifting appliances, chains and lifting gears to which this rule applies shall, as respects the incidental or its occasional use in, or for the purpose of, building operations or works of engineering construction be excluded-

- (a) from the operations of the rules specified in column 1 of the Second Schedule to the extent respectively specified in column 2 of that Schedule; and
- (b) subject to the exceptions and conditions respectively specified in column 3 of the Second Schedule.

(2) This rule applies to any lifting appliance chain, rope or lifting gear which-

- (a) forms part of the permanent equipment of a workplace or any other premises to which the safety provisions in sections 30, 31 and 32 of the Act apply, and which is used at the workplace or those premises in raising or lowering for purposes other than building operations or works of engineering construction, but is being used for those operations or works at that workplace or those premises; or
- (b) is regularly and ordinarily used in the processes of loading, unloading, moving or handling goods in, on or at any dock, wharf or quay in any port or harbour specified in the First Schedule of the Factories (Docks) Rules, 1962 but is being used for building operations or works of engineering constructions in, on or at a dock, wharf or quay in any port harbour as specified in that Schedule.

Delivery of
loads with
lifting gears
attached

83. Where any article, material or load intended for use in building operations or works of engineering construction is-

- (a) delivered at or adjacent to the site of those operations or works with a chain, rope or lifting gear

attached thereto; and

- (b) designed for use as a means of raising and lowering that class of load when removing it from the point of delivery to a position on the site; and
- (c) the chain, rope or gear is free from patent defect, whether of construction or quality, and is not owned or hired by a contractor or employer of the workman who is undertaking those operations or works on the site,

the requirements of rules 110, 111, 116 and 117 shall not apply in respect of the use of that chain, rope, or lifting gear for raising or lowering the load so long as the chain, rope or gear remains attached to the article, material or load.

Hoists forming
part of
permanent
equipment

84. Rules 84, 91, 118, 120 and 124 shall not apply to a hoist forming part of the permanent equipment of any structure or underground shaft and which is regularly and ordinarily used for the carriage of persons or goods, but no such hoist shall be used for the purpose of building operations or works of engineering construction unless the following conditions are complied with-

- (a) the hoist not be used for carrying persons unless a maximum number of persons to be carried at any time has been specified by the marker or by an insurer of the hoist or by a competent firm of lift engineers carrying out periodic examinations of the hoist, a greater number is not being carried;
- (b) the hoist shall not be so used for carrying materials, tools or other articles, other than lifting articles readily carried by a persons who is riding in the hoist, unless the hoist complies with the requirements of section 35 of the Act;
- (c) on any occasion when the hoist has been used for

raising or lowering for the purpose of those operations or works the hoist way gate or lift door at a landing place shall not be opened except where it immediately necessary for it to be open to afford access to the hoist for some other purposes.

Hoists
manufactured
before the
commencement
of these rules

85.-(1) In the case of hoists manufactured before the date of commencement of these Rules, if it is not practicable to comply with any requirement of rules 118(2), 118(3), 120 and 124 it shall be sufficient if the hoists has been brought as near as is practicable into conformity with that requirement and a certificate that this has been done has been obtained from a competent person.

(2) In the case of a hoist which was in use at the date of commencement of these Rules and so long thereafter as it is continued to be used in building operations and works of engineering construction, it shall be sufficient if the requirements of paragraph (1) were complied with within three years from the date of commencement of these rules.

Construction,
maintenance
and inspections

86.-(1) Every lifting appliance and every part thereof including all working gear and all other plant or equipment used for anchoring or fixing the appliance shall-

- (a) be of good mechanical construction, sound material, adequate strength and free from patent defect;
- (b) be properly maintained; and
- (c) as far as the construction permits, be inspected at least once in every week by the driver if competent for the purpose, or other competent person.

(2) A report of the results of every inspection carried out under the provisions of paragraph (1)(c), signed by the person carrying out the inspection, shall be made forthwith in the prescribed form containing the prescribed particulars.

(3) In the case of a site where the employer whom the inspection was carried out has reasonable grounds for believing that the operations or works will be completed in a period of less than thirty days, the provision in this rule requiring that a report to be made and signed, in so far as it relates to lifting appliances not working by mechanical power and all plants or equipment used for anchoring or fixing such appliances, shall be deemed to have been satisfied, if the person in charge of the operations or works carried on by that employer at that site has himself carried out the inspection and is a competent person.

(4) If, within one week of the date of the inspection carried out under the provisions of paragraph (1)(c), employer or the person in charge of the operations or works carried out reports to his employer in writing that-

- (a) the lifting appliance and plant or equipment were inspected by him; and
- (b) he has found the lifting appliance and plant or equipment in good order, or observed certain defects.

(5) The date and the results of the inspection, together with the name of the person making the inspection shall be entered by the employer in the prescribed form together with the prescribed particulars.

Support,
anchoring,
fixing and
erecting

87.-(1) Every lifting appliance shall be adequately and securely supported.

(2) Every part of a stage, scaffold, framework or other structure and every mast, beam, pole or other article of plant or equipment supporting a lifting appliance or any part thereof, having regard to the nature of the lifting appliance, its lifting and reaching capacity and the circumstances of its use, shall be of good construction and adequate strength and shall be of sound material and free from patent defect.

(3) Every part of the framework of every crab or winch, including its bearers, shall be of metal.

(4) Any anchoring or fixing arrangements provided in connection with a lifting appliance shall be adequate and secure.

(5) Every temporary attachment or connection of a rope, chain or other plant or equipment, used in the erection or dismantling of a lifting appliance shall be adequate and secure.

(6) In the case of a crane which is on occasion dismantled, a jib or boom which is separated from the crane in dismantling shall be clearly marked so as to indicate the crane of which it was a part.

Precaution
where lifting
has traveling or
slewing motion

88.-(1) On every stage, gantry or other place where a lifting appliance having a traveling or slewing motion is in use, an-unobstructed passageway not less than 600mm wide shall be maintained between any traveling or moving part of the appliance and any guard-rails, fencing or other nearby fixture.

(2) Where at any time it is impracticable to maintain a passage required by paragraph (1) at any place or point, all reasonable steps shall be taken to prevent the access of any person to that place or point.

Platforms for
crane drivers
and signalers

89.-(1) Where a platform is provided for the person driving or operating a crane, or for a signaler, the platform shall be-

- (a) of sufficient area for the persons employed thereof;
- (b) close planked or plated; and
- (c) provided with safe means of access, and every side of the platform, being a side thereof from which a person is liable to fall a distance of more than 2.0m shall be provided with a suitable guard-rail or guard-

rails of adequate strength, to a height of at least 1.0m above the platform and above any raised standing place on the platform, and with toe-boards up to a sufficient height not less than 200mm and so placed as to prevent as far as possible the fall of persons, materials and tools from the platform.

(2) The space between any toe-board and the lowest guard-rail above it on any platform for the person or persons driving or operating a crane, or for a signaller, shall not exceed 700mm.

(3) Guard-rails and toe-boards required by this rule may be removed or remain un-erected only for the time and to the extent necessary for the access of persons or for the movement of materials.

Cabin for
drivers

90.-(1) Subject to paragraph (2), (3) and (4), the driver of a power-driven lifting appliance shall be provided with a suitable cabin which shall-

- (a) afford him adequate protection from the weather; and
- (b) be so constructed as to afford ready access to such parts of the lifting appliance as are within the cabin and need periodic inspection or maintenance.

(2) No cabin shall be provided which prevents the driver from having such clear and unrestricted view as is necessary for the safe use of the appliance.

(3) Subject to paragraph (4), the cabin shall, before the lifting appliance is put into general use, be completely erected, or other adequate provision be made for the protection of the driver from the weather.

(4) Paragraphs (1), (2) and (3) shall not apply-

- (a) in cases where the driver is indoors or is otherwise

adequately protected from the weather;

- (b) to a hoist other than a hoist operated only from one position alongside the winch;
- (c) to lifting appliances mounted on wheels and having a maximum safe working load of one ton or less;
- (d) to any machine incorporating a lifting appliance where the primary purpose of that machine is not that of a lifting appliance; and
- (e) to lifting appliances for occasional use or for use for only short periods.

Drums and
pulleys

91.-(1) Every drum or pulley round which the chain or wire rope of a lifting appliance is carried shall be of suitable diameter and construction for the chain or rope used.

(2) Every chain or rope which terminates at the winding drum of a lifting appliance shall be properly secured thereto and at least two turns of the chain or rope shall remain in the drum in every operating position of the appliance.

Brakes,
controls, safety
devices etc

92.-(1) Every crane, crab and winch shall be provided with an efficient brake or brakes or other safety device which will prevent the fall of the load when suspended, and by which the load can be effectively controlled whilst being lowered.

(2) On every lifting appliance, every lever, switch or other device provided for controlling the operation of any part of the appliance, being a lever, handle, switch or other device whose accidental movement or displacement is liable to cause danger, shall, where practicable, unless it is so placed or the appliance is so constructed as to prevent accidental movement or displacement, be provided with a suitable spring or other locking arrangement to prevent the accidental movement or displacement.

(3) In the case of a lifting appliance which was in use in the works of engineering construction, at the date of commencement of these Rules and thereafter, it shall be sufficient if the requirements of paragraph (2) are complied with within two years from the date of commencement.

(4) Every lever, handle, switch or other device provided for controlling the operation of any part of a lifting appliance shall have upon or adjacent to it clear markings to indicate its purpose and mode of operation.

(5) The provisions of paragraph (4), shall not apply to rotating handles for raising or lowering the load in the case of a winch or non-derricking jib crane not operated by mechanical power.

Safe means of
access

93. Where a person engaged on the examination, repair or lubrication of a lifting appliance is liable to fall a distance of more than 2.0m there shall, be provided and maintained-

- (a) a safe means of access to and egress from the place at which the person has to work with,
- (b) where necessary, adequate hand holds and footholds.

Poles or beams
supporting
pulley blocks or
gin wheels

94. No pulley block or gin wheel suspended from or supported by a pole or beam shall be used for raising or lowering materials unless it is effectively secured to the pole or beam and the pole or beam is-

- (a) of adequate strength for the purpose for which it is being used; and
- (b) adequately and properly secured so as to support the pulley block or gin wheel and the load with safety and so as to prevent undue movement of the pole or beam.

Stability of
lifting
appliances

95.-(1) Appropriate precautions shall be taken to ensure the stability of lifting appliances used on a soft or uneven surface or on a slope.

(2) No crane shall be used for raising or lowering unless, it is either securely anchored or adequately weighted by suitable ballast which shall be properly placed on the crane structure and sufficiently secured to prevent the ballast being accidentally displaced.

(3) No part of any rails on which a crane is mounted or the sleepers supporting those rails shall be used as anchorage for a crane used for raising or lowering.

(4) The whole of the appliances for the anchorage or ballasting of a crane shall be examined by a competent person on each occasion before the crane is erected.

(5) After each erection of a crane on a site and after each removal of a crane about or to such a site, or any adjustment to any member of the crane, being a removal or adjustment which involves changes in the arrangements for anchoring or ballasting the crane, the security of the anchorage or the adequacy of the ballasting, as the case may be, shall, before the crane is taken into use, be tested by a competent person, by the imposition either-

(a) of a load of twenty-five per cent above the maximum load to be lifted by the crane as erected at the positions where there is the maximum pull on each anchorage; or

(b) of a lesser load arranged to provide an equivalent test of the anchorage or ballasting arrangement.

(6) A report of, and the result of, every test under paragraph (5), shall be made forthwith in the prescribed form and shall contain the prescribed particulars, and signed by the person who carried out the test.

(7) If the person making test under paragraph (5) considers that the maximum load which may safely be lifted by that crane as erected is less than the safe working load of the crane, that person shall specify the maximum load among the particulars to be recorded.

(8) The person making the test under paragraph (5) shall, after every test, draw a loading diagram appropriate to the stability of the crane as to the time of the test, taking into account, in the case of a crane mounted on wheels, the condition of the track, and indicating a modified safe working load or loads, which diagram shall be affixed in a position where it can readily be seen by the crane driver, and any modified safe working load or loads shall be deemed for the purpose of these Rules to be the safe working load or loads of the crane as erected.

(9) Where the stability of a crane is secured by means of removable weights, a diagram or notice indicating the position and amount of those weights shall be affixed on the crane where it can be readily seen.

(10) No crane shall be used or erected under weather conditions likely to endanger its stability and after exposure to weather conditions likely to have affected the stability of the crane, and the anchorage arrangements and ballast shall be examined by a competent person, as soon as practicable before the crane is used, and any necessary steps shall be taken to ensure the stability of the crane.

Rail mounted
cranes

96.-(1) All rails on which a crane moves shall-

- (a) be supported on a surface sufficiently firm to prevent undue movement of the rails;
- (b) have an even running surface, be sufficiently and adequately supported, and be of adequate section;
- (c) be joined by fish plates or double chairs;

- (d) be securely fastened to sleepers or bearers;
- (e) be laid in straight lines or in curves of such radii that the crane can be moved freely and without danger of derailment; and
- (f) be provided with adequate stops or buffers on each rail at each end of the track.

(2) Sub-paragraph (c) and (d) of paragraph (1) shall not apply in the case of a crane on bridge rails or in the case of any crane if other adequate steps are taken to ensure the proper junction of the rails and to prevent any material variation in their gauge.

(3) All rails and equipment referred to in paragraph (1) shall be properly maintained.

(4) A crane mounted on rails shall be provide with effective brake, for the traveling motion, or sprags, scotches or chocks shall be available and used when necessary.

(5) Where a scotch derrick crane is mounted on more than one bogie, trolley or wheeled carriage, the crane sleepers or land ties, and if necessary the bogies, trolley or wheeled carriages, shall be rigidly braced and properly connected together, and the rails on which each bogie, trolley or wheeled carriage moves shall be level, and the crane shall be moved on the track only in a manner that does not cause instability, rocking or distortion either of the crane structure or of the supporting framework.

(6) Every traveling crane on rails shall be provided with guards to remove from the rails any loose material likely to cause danger.

Mounting of
cranes

97. Every bogie, trolley or wheeled carriage on which a crane is mounted shall, having regard to the purpose for which the crane is to be or is being used, be of good construction, adequate strength and suitable to support the crane and shall be

of sound material, free from patent defect and properly maintained.

Cranes with
derricking jibs

98.-(1) On every crane having a derricking jib operated through a clutch, there shall be provided and properly maintained an effective interlocking arrangement between the derricking clutch and the pawl sustaining the derricking drum to ensure that the clutch cannot be disengaged unless the pawl is in effective engagement with the derricking drum, and the pawl cannot be disengaged unless the clutch is in effective engagement with the derricking drum.

(2) The provisions of paragraph (1) of this rule shall not apply to a crane in which-

- (a) the hoisting drum and the derricking drum are independently driven; or
- (b) the mechanism driving the derricking drum is self-locking.

Restrictions on
use of cranes

99.-(1) Notwithstanding paragraph (2) of this rule, and unless no undue stress is imposed on any part of the crane structure or mechanism, and the stability of the crane is not thereby endangered, the hoisting mechanism of a crane shall only be used for raising or lowering loads vertically and under the supervision of a competent person.

(2) A crane with a derricking jib shall not be used with the jib at a radius exceeding the maximum radius required to be specified for the job in the certificate of test and examination required by rule 112.

Use of cranes
with timber
structural
member

100. No person shall use a crane which has any timber structural member.

prohibited

Erection of
cranes under
supervision

101. No person shall erect a crane except under the immediate direct supervision of a competent person.

Competent
persons to
operate lifting
appliances and
give signals

102.-(1) No person who-

(a) is not trained and competent; or

(b) is under the age of eighteen years,

shall, except for training purposes and under the direct supervision of a person qualified for the purpose, drive or operate a crane or other lifting appliance.

(2) The employer of an operator or driver of a crane or other lifting appliance shall, before taking the driver or operator into employment test and ensure the competency of the operator or driver and issue him with a certificate of competency endorsed in respect of the crane or lifting appliance to be operated or driven.

(3) No person under the age of eighteen years shall be employed, except under the direct supervision of a competent person for training purposes, either to give signals to the operator of a lifting appliance driven by mechanical power or to operate the appliance.

(4) Subject to paragraphs (5) and (6) of this rule, and except, where clear and unrestricted view is not necessary for safe working, there shall be appointed and suitably stationed throughout the operation, one or more competent persons to give necessary signals to the operator or driver of a crane or other lifting appliance who may not have a clear and unrestricted views of the load and its vicinity or the point of attachment for a load and its vicinity.

(5) Where and in so far as it is impracticable to comply with the requirements of paragraph (4), other effective

measures shall be taken to enable the driver or operator of a lifting appliance-

- (a) to ascertain the position of the load, or point of attachment for a load, when it is in the vicinity of a loading or unloading point or of any other place at which danger is reasonably to be anticipated; or
- (b) to ensure the safe movement of the load.

(6) The provisions of paragraphs (4) and (5) of this rule, shall not apply-

- (a) in the case of a hoist of an aerial, cableway, or of an aerial ropeway; or
- (b) in the case other than that of a hoist as respects places where the appliance can raise or lower the load, or point of attachment for a load vertically only, without any horizontal or slewing motion if for safe working, the driver or operator of the appliance needs information related to the movement, when it is at, or in, the immediate vicinity of certain points only, and effective arrangements are made by means of a signaling system, position indicators or otherwise, for providing the driver or operator with the information necessary for safe working.

(7) There shall be efficient signaling arrangements between the driver or operator and persons employed at a loading or unloading point of an aerial cableway or aerial ropeway.

Signals

103.-(1) Every signal given for the movement or stopping of a lifting appliance shall be distinctive in character and such that the person to whom it is given is able to hear or see easily.

(2) Devices or apparatus used for giving sound, colour or light signals shall be properly maintained and the means of

communication shall be adequately protected from accidental interference.

Testing and
examination of
cranes

104.-(1) Subject to paragraph (4) of this rule, no crane, crab or winch shall be used unless it has been tested and thoroughly examined by a competent person within the previous twelve months.

(2) No pulley block, gin wheel or sheer legs shall be used in the raising or lowering of a load weighing one ton or more unless it has been tested and thoroughly examined by a competent person.

(3) Subject to paragraph (4) of this rule, no crane, crab or winch shall be used after any substantial alteration or repair affecting its strength or stability until it has been tested and thoroughly examined by a competent person.

(4) No pulley block, gin wheel or sheer legs shall, after any substantial alteration or repairs be used in the raising or lowering of a load weighing one ton or more until it has been tested and thoroughly examined by a competent person.

(5) Subject to paragraph (4) of this rule, no lifting appliance shall be used unless it has been thoroughly examined by a competent person within the previous fourteen months or after it has undergone substantial alteration or repair.

(6) Nothing in paragraphs (1), (2) and (3) and (4) shall apply to a hoist.

(7) No crane, crab, winch, pulley block or gin wheel shall be used unless there has been obtained in such form as may be prescribed as respects the kind of lifting appliance tested and examined, a certificate of any test and examination required by paragraphs (1) and (2) signed by the person making or responsible for the carrying out of the test and examination and specifying-

(a) the safe working load or loads;

(b) in the case of a crane with a variable operating radius, including a crane with a derricking jib, the radii of the jib, trolley or crab appropriate to the specified safe working load or loads; and

(c) in the case of a crane with a derricking jib, the maximum radius at which the jib may be worked.

(8) A report in writing containing the prescribed particulars of the results of every test or examination required by paragraphs (1), (2) and (3) signed by the person carrying out the test or examination, shall be made within twenty-eight days:

Provided that this paragraph shall not apply to a test or examination of which a certificate has been obtained in accordance with paragraph (5).

(9) The person making the report of any test or examination required by paragraphs (1), (2) and (3) shall, within twenty-eight days of the completion of the test or examination, send a copy of the report to the Chief Inspector and to the inspector of a workplace of the area where the test is carried out.

Marking of safe
load

105.-(1) The safe working load or safe working loads and means of identification shall be plainly marked-

(a) upon every crane, crab or winch; and

(b) upon each pulley block gin wheel, sheer legs, derrick pole, derrick mast or aerial cableway used in the raising or lowering of a load weighing one ton or more.

(2) Every crane of variable operating radius, including a crane with a derricking jib, shall-

(a) have plainly marked upon it the safe working load at various radii of the jib, trolley or crab, and in the case of a crane with a derricking jib, the maximum

radius at which the jib may be worked; and

- (b) be fitted with an accurate indicator, clearly visible to the driver showing the radius of the jib, trolley or crab, at any time and safe, working load corresponding to that radius.

Indication of
safe working
load

106.-(1) No jib crane having either or fixed or a derricking jib, other than a mobile crane shall be used unless it is fitted with-an approved type of automatic safe load indicator which shall be properly maintained, and the indicator shall be tested by a competent person other than the crane driver after erection or installation of the crane for the purpose of any building operation or work of engineering construction and before the crane is taken into use.

(2) No mobile crane having either, affixed or derricking shall be used unless it is fitted with an approved type of automatic safe load indicator which shall be properly maintained, and every such indicator shall be tested by a competent person before the crane is taken into use-

- (a) on each occasion after it has been wholly or partly dismantled; and
- (b) after each erection, alteration or removal of the crane for the purpose of any building operations or works of engineering construction, being an erection, alteration or removal likely to have affected the proper operation of the indicator.

(3) The indicator shall be inspected in any case at intervals not exceeding one week, when the crane is in use, by the person carrying out the inspection required under rule 86 and the result of these inspections shall be reported in the manner specified in paragraph (2) of that rule.

(4) A report of the results of every test required by this rule, signed by the person carrying out the test, shall be made

forthwith in the prescribed form and containing the prescribed particulars.

(5) This rule shall not apply-

- (a) to a guy derrick crane, being a crane of which the mast is held upright solely by means of ropes with the necessary fittings and tightening screws;
- (b) to a hand crane which is being used solely for erecting or dismantling another crane; or
- (c) to a crane having a maximum safe working load of one ton or less; or
- (d) until the expiration of two years after the date of commencement of these Rules, to any excavator adapted for use as a crane.

Load not to
exceed safe
working load

107. Except for the purposes of making tests, when the safe working load has been exceeded, no crane, crab, winch, pulley blocks, gin wheels, sheer legs, derrick poles and derrick masts shall be loaded beyond the safe working load.

Precaution on
raising or
lowering loads

108.-(1) Where there is lifted on a crane, crab, winch, other than a piling winch, sheer legs or aerial cableway a load which is equal to, or slightly less than, the relevant safe working load which is not already sustained wholly by the appliance, the lifting shall be halted after the load has been raised a short distance and before the operation is proceeded with.

(2) Where more than one lifting appliance is required to raise or lower one load-

- (a) the plant or equipment used shall be so arranged and fixed that no such lifting appliance shall at any time be loaded beyond its safe working load or be rendered unstable in the raising or lowering of the

load; and

- (b) a competent person shall be specially appointed to supervise the operation.

Scotch and guy
derrick cranes

109.-(1) The jib of a scotch derrick crane shall not be erected between the back stays of the crane.

(2) No load which lies in the angle between the back stays of a scotch derrick crane shall be moved by that crane.

(3) Appropriate measures shall be taken to prevent the foot of the king post of a scotch derrick crane from being lifted out of its socket or support whilst in use.

(4) Where the guy of a guy derrick crane cannot be fixed at approximately equal inclinations to the mast and so that the angle between adjacent pairs of guys are approximately equal, such other measures shall be taken as will ensure the stability of the crane.

Construction,
testing,
examination
and safe
working loads

110.-(1) Subject to the provisions of paragraph (2) of this rule, no chain, rope or lifting gear shall be used in raising or lowering or as a means of suspension unless-

- (a) it is of good construction, sound material, adequate strength, suitable quality, and free from patent defect;
- (b) the wire rope has been used before the commencement of these Rules; or
- (c) a fibre rope or fibre sling has been tested and examined by a competent person, and these have been obtained in such form as may be prescribed a certificate-
 - (i) if that test and examination specifying the

safe working load and signed by the person making or responsible for the carrying out of the test and examination; and

- (ii) marked in plain legible figures and letters with the safe working load and means of identification.

(2) A rope or rope sling need not be marked with the safe working load if-

- (a) its safe working load is contained in the report required by rule 96; and if the rope or sling is so marked as to enable its safe working load to be ascertained from that report; or
- (b) in the case of a wire rope used before the commencement of these Rules; or
- (c) a fibre rope or fibre sling its safe working load can be ascertained from a table of safe working loads posted at a prominent position on the site of the operations or works;

(3) In the case of a rope or rope sling which is not required to have been tested and which is not marked with the safe working load, the safe working load required to be entered in the report or required to be shown by the table, shall be deemed for the purpose of these Rules be the safe working load of the rope or rope sling.

(4) No wire rope shall be used in raising, lowering or as a means suspension if in any length of ten diameters the total number of visible broken wires exceeds five percent of the total number of wires in the rope.

(5) No chain, rope or lifting gear shall be loaded beyond its safe working load except for the purpose of making tests and then only to such extent as a competent person appointed to carry out the tests may authorize.

Testing of
chains, rings etc
,altered or
repaired by
welding

111.-(1) No chain, ring, link, hook, plate clamp, shackle, swivel or eye-bolt which has been lengthened, altered or repaired by welding shall be used in raising or lowering or as a means of suspension unless, since the lengthening, alteration or repair, has been tested and thoroughly examined by a competent person and there has been obtained in the prescribed form, a certificate of that test and thorough examination, signed by the competent person or by the person responsible for the carrying out of the test and thorough examination and specifying the safe working load.

(2) The requirements of paragraph (1) of this rule as to the testing and certification shall not apply to a chain attached to the bucket of either drag-line or an excavator

Hooks

112. Every hook used for raising or lowering or as a means of suspension shall either be provided with an efficient device to prevent the displacement of the sling or load from the hook, or be of such shape as to reduce as far as possible the risk of any displacement.

slings

113.-(1) Every sling used for raising or lowering on a lifting appliance shall be securely attached to the appliance, and the method of attachment shall not be a method likely to result in damage to any part of the sling or to any lifting gear supporting it.

(2) No double or multiple sling shall be used for raising or lowering if-

- (a) the upper ends of the sling legs, are not connected by the means of a shackle, ring or link of adequate strength; or
- (b) the safe working load of any sling leg is exceeded as a result of angle between the sling legs.

Edges of load
not to come
into contact
with sling etc

114. Adequate steps shall be taken by the use of suitable packing or otherwise to prevent the edges of the load being raised or lowered from coming into contact with any sling, rope or chain, where this would cause danger.

Knotted chains

115.-(1) A load shall not be raised, lowered or suspended on a chain or wire rope which has a knot tied in any part of the chain or rope under direct tension.

(2) No chain which is shortened or joined to another chain by means of bolts and nuts inserted through the links shall be used for raising, lowering or suspending any load.

Examination of
chain ropes
and lifting gear

116.-(1) No chain, rope or lifting gear shall be used for raising lowering or as a means of suspension unless it has been thoroughly examined by a competent person at least once within the previous six months, but chains, ropes and lifting gear not in regular use need only be examined when necessary.

(2) A report, in writing, containing the prescribed particulars of the results of every examination carried out under this rule signed by the person carrying out the examination, shall be made immediately after the examination is carried out.

Annealing of
chain and
lifting gear

117.-(1) A chain or lifting gear, other than a rope, sling or lifting gear of a class description specified in the Third Schedule, or exempted by certificate of Chief Inspector upon the grounds that it is made of a material or is so constructed that it cannot be subjected to heat treatment without risk of damage, shall not be used in raising or lowering or as a means of suspension unless-

- (a) it has been effectively annealed or subjected to some appropriate form of heat treatment under the supervision of a competent person within the previous twelve months or, in the case of chains or

slings of 13mm bar or smaller material, within the previous six months; and

- (b) a report has been made in writing containing the prescribed particulars of every annealing or appropriate heat treatment signed by the competent person under whose supervision the annealing or heat treatment was carried out.

(2) Notwithstanding paragraph (1), chains or lifting gear not in regular use or used solely on lifting appliances worked by hand may be annealed or subjected to the appropriate heat treatment only when necessary.

Safety hoist
ways, platforms
and cages

118.-(1) The hoist-way of every hoist shall at all points at which access to the hoist-way is provided or at which persons are liable to be struck by any moving part of the hoist, be efficiently protected by a substantial enclosure, and enclosures shall where access to the hoist is needed, be fitted with gates.

(2) An enclosure or gate provided under the provision of this shall, where practicable, extend to a height of at least 2.0m, except where a lesser height is sufficient to prevent a person falling down the hoist-way and there is no risk of a person coming into contact with any moving part of the hoist, but shall in no case be less than 1.0m.

(3) Gates fitted under the provisions of this rule shall be kept closed except at a landing place where the platform or cage is at rest and it is for the time being necessary for the gate to be open for the purposes of loading or unloading goods, plant or materials, or to allow persons to enter or leave the cage.

(4) Without prejudice to the obligation of every contractor and employer or workers, under these Rules, it shall be the duty of every person, immediately after using a gateway to see that the gate is closed, unless it is for the time being necessary as explained in paragraph(3) for the gate to be open.

(5) A hoist shall, where practicable, be provided with properly maintained efficient devices which will, support the platform or cage, together with its safe working load if the hoist, rope or ropes of any part of the hoisting gear fail.

(6) A hoist shall be provided with properly maintained efficient automatic devices which will ensure that the platform or cage does not overrun the highest point to which it is for the time being constructed to travel.

Operations of
hoists

119.-(1) The construction and installation arrangements of every hoist shall, where practicable, be such that it can operated at any one time only from one position and a hoist shall not be, operated from the cage unless the requirements of rule 107 are complied with.

(2) Except where a clear and unrestricted view is not necessary for safe working, effective arrangements shall be made for signals for operating the hoist to be given to the operator of a hoist from each landing place at which the hoist is used and to enable him to stop the platform or cage of the hoist at the appropriate level if he does not have a clear and unrestricted view of the platform or cage throughout its travel.

Winches

120. Where a hoist is operated by means of a winch, the winch shall be so constructed that the brake is applied when the control lever or switch is not held in the operating position and the winch shall not be a winch fitted with a pawl and ratchet gear on which the pawl has to be disengaged before the platform or cage can be towered.

Safe working
load and
marking of
hoists

121.-(1) The safe working load shall be plainly marked on every hoist, platform or cage and no load greater than that load shall be carried, except that for the purpose of carrying out a test the safe working load may be exceeded, by such amount

as a competent person appointed to carry out the test, may authorize.

(2) Where a hoist is used for carrying persons the maximum number of persons to be carried at any one time shall also be so marked, and a greater number of persons shall not be carried.

(3) There shall be a readily legible notice on the platform or cage stating that the carriage of persons is prohibited if the platform or cage is for carriage of goods and materials only.

Tests and
examination of
hoists

122.-(1) No hoist shall be used unless-

- (a) in the case of a hoist manufacturing or substantially altered or substantially repaired after the date of commencement of these Rules, it has, since manufacture, alteration or repair, tested and thoroughly examined by a competent person, and there has been obtained, in such form, a certificate of such test and examination, signed by the person making or responsible for the carrying out of the test and examination and specifying the safe working load of the hoist and in the case of a hoist used for carrying persons the minimum number of persons to be carried at one time;
- (b) in the case of use for carrying persons, it has, since it was last erected or the height of travel of the cage was last altered, whichever is the later, been tested and thoroughly examined by a competent person and a report of the results of such test and examination signed by the person making or responsible for the carrying out of the test and examination, has been made in the prescribed form and containing the prescribed particulars; and
- (c) it has been thoroughly examined by a competent

person at least once within the previous six months.

(2) A report, in writing, containing the prescribed particulars of the results of every examination required by paragraph (1) (c) signed by the person making it, or responsible for the carrying out of the examination, shall be made within twenty eight days.

(3) The person making the report of a test or examination required by paragraph (1) shall within twenty-eight days of the completion of the test or examination send a copy of the report to the chief inspector and to the inspector of a workplace of the area where the test is made.

Carrying
persons by
means of lifting
appliances

123.-(1) No person shall be raised, lowered or carried by a power driven lifting appliance except-

- (a) on the driver's platform in the case of a crane; or
- (b) on a hoist; or
- (c) on an approved suspended scaffold; or
- (d) as permitted by paragraph (2).

(2) A person may be raised, lowered or carried by a power-driven lifting appliance otherwise than in accordance with the provisions of paragraph (1) only-

- (a) in circumstances where the use of a hoist or of an approved suspended scaffold is not reasonably practicable and the requirements of paragraphs (3) and (4) are complied with; or
- (b) on an aerial cableway or aerial ropeway if the requirements of paragraph (3)(b) to (d) and (4) are complied with.

(3) The requirements referred to in paragraph (2) are

that-

- (a) the appliance can be operated from one position only;
 - (b) any winch used in connection with the appliance shall comply with the requirements of rule 108;
 - (c) no person shall be carried except in a suitable chair or cage, or in a suitable skip or other receptacle at least 1.0m deep; and
 - (d) suitable measures shall be taken to prevent the chair, cage, skip or other receptacle from spinning or tipping in a manner dangerous to any occupant.
- (4) A chair, cage, skip or other receptacle used in pursuance of this rule shall be-
- (a) of good construction, sound material, adequate strength and properly maintained, and
 - (b) provided with suitable means to prevent any occupant falling out and shall not contain material or tools liable to interfere with his handhold or foothold or otherwise endanger him.

Hoists carrying
persons

124.-(1) No person shall be carried by a hoist unless it is provided with a cage which is-

- (a) so constructed as to prevent, when the cage gate or gates are shut, a person carried from falling out or from being trapped between a part of the cage and any fixed structure or other moving part of the hoist or from being struck by articles or materials falling down the hoistway; and
- (b) fitted on each side from which access is provided to a landing place with a gate which, shall have efficient interlocking or other devices to secure that the gate cannot be opened except when the cage is at

a landing place, and the cage cannot be moved away from any place until the gate is closed.

(2) Every gate in the hoistway enclosure of a hoist used for carrying persons shall be fitted with efficient interlocking or other devices to secure that no gate can be opened except when the cage is at a landing place, and the cage cannot be moved away from any place until every gate is closed.

(3) In connection with every hoist used for carrying persons there shall be provided suitable efficient automatic devices which will ensure that the cage comes to rest at a point above the lowest point at which the cage can travel.

Secureness of
load

125.-(1) Every part of a load shall be securely suspended or supported whilst being raised or lowered and shall be adequately secured to prevent danger from slipping or displacement.

(2) Where, by reason of the nature of position of the operation a load is liable, whilst being moved on a lifting appliance or lifting gear, to come into contact with any object so that the object may become displaced, special measures shall be adopted to prevent the danger.

(3) Every container or receptacle used for raising or lowering stone, bricks, tiles, slates or other objects shall be so enclosed, constructed or designed as to prevent the accidental fall of those objects.

(4) The requirement under paragraph (3) shall not apply to a grab, shovel, or other similar excavating receptacle if effective steps are taken to prevent any person being endangered by a fall of objects there from.

(5) Goods or loose material shall not be placed directly on a platform of a hoist unless the platform is enclosed or other effective precautions are taken where necessary to prevent the fall of any goods or material.

(6) No truck or wheelbarrow shall be carried on hoist platform unless it is efficiently scotched or secured on the platform.

(7) No load truck or wheel barrow shall be carried on the open platform of a hoist unless the truck or wheelbarrow is so loaded that no part of the load is liable to fall off.

(8) No load shall be suspended from a lifting appliance unless a competent person is actually in charge of the appliance.

PART XII EXCAVATIONS SHAFTS AND TUNNELS

Prevention of
danger

126.-(1) An adequate supply of timber of suitable quality or other suitable support shall where necessary be provided and used to prevent, so far as is reasonably practicable and as early as is practicable in the course of the work, danger to any person employed from, a fall or dislodgement of earth, rock or other material forming aside at the roof or adjacent to any excavation, shaft earthwork or tunnel.

(2) The provisions of paragraph (1) of this rule shall not apply-

- (a) to any excavation, shaft, or earthwork where, having regard to the nature and slope of the sides of the excavation, shaft or earthwork and other circumstances, no fall or dislodgement of earth or other material so as to bury or trap a person employed or as to strike a person employed from a height of more than 1.2m is liable to occur; or
- (b) to persons carrying out inspections or examinations required by this rule or actually engaged in timbering or other work for the purpose of making a place safe, if appropriate precautions are taken to ensure their safety as far as circumstances permit.

(3) In the case of tunneling operations on works of engineering construction, no person shall be held not to have complied with a requirement of paragraph (2) of this rule by reason of any matter proved to have been due to physical conditions over which he had no control and against which it was not reasonable practicable for him to make provision

Inspection and
examination of
excavations

127.-(1) Subject to the provisions of paragraph (1) of rule 126, every part of any excavation, shaft, earthwork or tunnel where persons are employed shall be inspected by a competent person at least once on every day during which persons are employed therein;

(a) the face of every tunnel and the working end of every trench more than two meters deep and the base or crown of every shaft shall be inspected by a competent person at the commencement of every shift.

(2) Subject to the provisions of paragraph (1) of rule 126, no person shall be employed in any excavation, shaft, earthwork or tunnel unless a thorough examination has been carried out by a competent person-

(a) of those parts thereof, and in particular any timbering or other support, in the region of the blast since explosives have been used in or near the excavation, shaft, earthwork or tunnel in a manner likely to have affected the strength or stability of that timbering or other support or any part thereof;

(b) of those parts thereof in the region of any timbering or other support or an part thereof that has been substantially damaged and in the region of any unexpected fall of rock or earth or other material; and

(c) of every part thereof within the immediately preceding seven days.

(3) The provisions of subparagraph (c) of paragraph (2) shall not apply to timbering or other support which has not been erected or installed for more than seven days.

(4) A report of the results of every thorough examination required by paragraph (2) of this rule, signed by the person carrying out the examination, shall be made on the day of the examination in the prescribed form and containing the prescribed particulars.

(5) In the case of a site where the employer for whom a thorough examination was carried out, has reasonable grounds for believing that the operations or works will be completed in a period of less than thirty days, the provisions of paragraph (4) of this rule shall be deemed to have been satisfied if the person in charge of the operations or works carried on by that employer at such a site-

- (a) has himself carried out the examination and is a competent person; and
- (b) if within one week of the date of the examination the competent person reports to his employer in writing the results and the date of such examination, together with the name of the person making the examination which are entered by the employer in the prescribed form.

Supervision
and execution
of timbering
and other work

128.-(1) No timbering or other support for any part of an excavation, shaft, earthwork or tunnel shall be erected or be substantially added to, altered or dismantled except under the direction of a competent person and so far as possible by a competent workmen possessing adequate experience of such work.

(2) All materials for any work under paragraph (1) shall be inspected by a competent person on each occasion before being taken into use and any material found defective in any respect shall not be used.

(3) Timbering or other support, for any part of any excavation, shaft, earthwork or tunnel shall be of good construction, sound material, free from patent defect and of adequate strength for the purpose for which it is used and shall be properly maintained.

(4) All struts and braces in any excavation, shaft, earthwork or tunnel shall be properly and adequately secured so as to prevent their accidental displacement or fall.

Means of
egress in case
of flooding

129. In any excavation, shaft or tunnel where there is reason to apprehend danger to persons employed therein from rising water or from an eruption of water or material there shall be provided, adequate means to enable such persons to reach positions of safety.

Prevention of
collapse of
structure

130. No excavation, shaft, earthwork, or tunnel which is likely to reduce, so as to endanger any person employed, the security or stability of any part of any structure, whether temporary or permanent, shall be commenced or continued unless adequate steps are taken before and during the progress of the work to prevent danger to any person employed from collapse of the structure or the fall of any part thereof.

fencing of
excavation

131.-(1) Every accessible part of an excavation, shaft, pit or opening in the ground near to which employed persons are working and into or down a site of which a person is liable to fall, a distance of more than two meters shall be provided with a suitable barrier placed as close as is reasonably practicable to the edge or shall be securely covered.

(2) Provisions of paragraph (1) shall not apply to any part of an excavation, shaft pit or opening while, and to the extent to which-

(a) the absence of such barrier and covering is

necessary for the access of persons or for the movement of plant or equipment or materials; or

- (b) it has not yet been practicable to erect such barrier or covering since the formation of that part of the excavation, shaft, pit or opening.

Safeguarding
edges of
excavation

132.-(1) No material shall be placed or stacked near the edge of any excavation, shaft, pit, or opening in the ground likely to endanger any persons employed below.

(2) No load, plant or equipment shall be placed or moved near the edge of any excavation, shaft, pit or opening in the ground where it is likely to cause a collapse of the side of the excavation, shaft, pit or opening and thereby endanger any person.

Construction
and
maintenance

133. Every cofferdam or caisson and every part thereof shall be of good construction, suitable and sound material, free from patent defect and of adequate strength and shall be properly maintained.

Means of
egress in case
of flooding

134.-(1) In any cofferdam or caisson there shall, so far as is reasonably practicable, be adequate means for persons to reach places of safety in the event of an inrush of water.

(2) No person shall be held not to have complied with a requirement of paragraph (1) of this rule by reason of any matter proved to have been due to physical conditions over which he had no control and against which it was not reasonably practicable for him to make provision.

Supervision of
work and
inspection of
materials

135.-(1) No cofferdam or caisson or part thereof shall be constructed or be placed in position or be substantially added to or altered or be dismantled except under immediate supervision

of a competent person and so far as possible by competent workmen possessing adequate experience of such work.

(2) All material for the construction or fixing of a cofferdam or caisson shall be inspected by a competent person on each occasion before being taken into use for such a purpose and material found to be unsuitable or defective in any respect shall not be used.

Inspections and
examinations

136.-(1) Subject to paragraph (2) of this rule, no person shall be employed in a cofferdam or caisson unless the cofferdam has been inspected and thoroughly examined at least once on the same or preceding day by a competent person-

- (a) in case explosives have been used in or near the cofferdam or caisson a manner likely to have affected the strength or suitability of the cofferdam or caisson or of any part thereof;
- (b) in case the cofferdam or caisson has been substantially damaged; and
- (c) in any case within the immediately preceding seven days.

(2) Sub-paragraph (c) shall not apply until seven days have elapsed since the cofferdam or caisson was erected or placed in its position on the site.

(3) A report of the results of every such examination signed by the person carrying out the examination shall be made on the day of the examination in the prescribed form and containing the prescribed particulars.

(4) This rule shall not apply in relation to persons-

- (a) actually engaged in the construction, placing, repairing, or alteration of the cofferdam or caisson; or
- (b) carrying out inspections or examinations required by

this rule, if appropriate precautions are taken to ensure their safety as far as circumstances permit.

Transport by
water

137.-(1) When any person employed is conveyed to or from any working place by water, proper measures shall be taken to provide for his safe transport.

(2) Vessels used for this purpose shall be of suitable construction, properly maintained, and shall be in charge of a competent person and shall not be overloaded.

Prevention of
drowning

138.-(1) Where, on or adjacent to the site of any operations or works to which these Rules apply, there is water into which a person employed is, in the course of his employment, liable to fall with risk of drowning-

(a) suitable rescue equipment shall be provided and kept in an efficient state and ready for use; and

(b) measures shall be taken to arrange for the prompt rescue of any such person in danger of drowning.

(2) Where there is a special risk of a fall from-

(a) the edge of adjacent land; or

(b) a structure adjacent to or above water; or

(c) a floating stage, secure fencing shall be provided near the edge to prevent such fall, and the fencing may be removed or remain un erected for the time and to the extent necessary the access of persons or the movement of materials.

Road works

139.-(1) Where a roadwork is in progress, the contractor shall take all reasonably practicable measures to avoid accidents.

(2) Workers employed on road construction work shall be protected from traffic by barricades, signs, lights, watchmen or other effective means.

(3) Signs and lights should be placed, where-

(a) they can easily be seen by approaching traffic; and

(b) they will not be obscured by splashes from traffic.

(4) Diversions shall be clearly marked, well defined, adequately lit and completely clear of protrusion and obstruction.

Explosives

140.-(1) A safety supervisor with adequate knowledge of the dangers connected with the use of explosives shall supervise and directly control the storage, handling and use of explosives.

(2) The safety supervisor shall ensure that when a charge is fixed, persons employed are in a position of safety where, as far as can be reasonably anticipated, they will not be injured by- the explosion or any flying material.

(3) No contractor shall permit or require any person to use an explosive unless such person has been-

(a) provided with, and uses suitable protective equipment; and

(b) trained in the operation, use and maintenance of an explosive powered tool.

**PART XIII
DEMOLITION**

Application of
this Part

141. The requirements of this Part shall apply in respect of the demolition of the whole or any substantial part of a building or other structure.

Joint operations

142. Where more contractors than one are undertaking a demolition, they shall, prior to the commencing of the operation, consult among themselves and with their safety supervisors appointed under rule 5 to the method by which, and the time at which, the operation shall be carried out.

Fire and
flooding

143. Before any demolition is commenced and also during the work, all practicable steps shall be taken to prevent danger to any person or property-

- (a) from risk of fire or explosion through leakage or accumulation of gas or vapour or otherwise; and
- (b) from flooding.

Precaution in
connection with
demolition

144.-(1) In any demolition works, no part of a building or of any structure shall be overloaded with debris or materials or persons as to render it unsafe to persons employed.

(2) Immediate supervision and direction of work by the safety supervisor shall be provided during-

- (a) the actual demolition of a building or structure or any part of a building or of a structure where there is a reasonably foreseeable risk of collapse in the course or as a result of the demolition which may be a danger to any person employed, whether the

collapse is of the building, the structure, or the part being demolished, or any other part; and

(b) the cutting of reinforced concrete, steelwork or ironwork forming part of the building or structure being demolished.

(3) Before any steelwork or ironwork is cut or released, precautions shall be taken to avoid danger from any sudden twist, spring or collapse.

(4) All practicable precautions shall be taken to avoid the collapse of any framed or partly framed building or structure when any part of the framing is removed there from.

(5) Except where a person is actually engaged in erecting or replacing shoring or other safeguards to a building to be demolished and appropriate precautions are taken to ensure his safety, precautions shall, where necessary before and during demolition, be taken to ensure the safety of persons employed by adequate shoring or other safeguards to prevent, as far as practicable, the accidental collapse of any part of the building or structure to be or being demolished, or of any adjoining building or structure.

PART IX OFFENCES AND PENALTIES

Offences and
penalties

145.-(1) Any person who contravenes or fails to comply with any of the provisions of these Rules, commits an offence and is liable to a fine of as shown in the occupational safety and health (general administrative rules), 2012.

(2) In case of a continuous offence under paragraph (1), that person shall be liable to an additional fine of five per centum of the initial fine for each day on which the offence continues.

FIRST SCHEDULE

SCAFFOLD INSPECTIONS

Form of reports of results of inspection under rule 63 of scaffolds, including boatswain's chairs, cages, skips and similar plant or equipment (and plant or equipment used for the purposes thereof).

NAME OR TITLE OF EMPLOYER OR

CONTRACTOR.....

ADDRESS OF SITE.....

WORK COMMENCED

ON(Date).....

Location and description of scaffold, etc, and other Plant or equipment Inspected	Date of inspection	Result of inspection; state whether in good order	Signature and name of person who made the inspection
(1)	(2)	(3)	(4)

SECOND SCHEDULE

EXTENT OF EXCLUSION UNDER RULE 56.

RULE	EXTENT OF EXCLUSION	EXCEPTIONS AND CONDITIONS
86	Paragraph (1) (c)	-
87	Paragraph (5)	-
88	The whole rule	-
89	The whole rule except subparagraphs	-
90	The whole rule	-
92	Paragraphs (2) and (3)	-
95	Paragraphs (5) and (7)	Save that where the crane is specially erected for use in the operations or works to which these Rules apply, the crane shall before that use be tested in accordance with paragraph (5) and a record shall be kept of the particulars of tests and paragraph (7) shall then apply.
96	Paragraph (1) (f) and (4)	-
98	The whole rule	-
104	The whole rule	-
105	Paragraph (2) (b)	-
106	The whole rule	-
110	Paragraph (1) (c)	If these are available to any person using the chain, rope or gear, means ascertaining its safe working load.
112	The whole rule	-
117	Paragraph (1) (b)	-

THIRD SCHEDULE

CHAINS AND LIFTING GEAR EXCEPTED UNDER RULE 117
(As to Heat Treatment)

1. Chains made of malleable cast-iron.
2. Pitched chains working "on sprocket or pocketed wheels".
3. The following when permanently attached to pitched chains, pulley blocks or weighing machines-rings, links, hooks, shackles and swivels.
4. The following when having screw-threaded parts or ball bearings or other case-hardened parts-hooks, eye-bolts and swivels.
5. Socket shackles secured to wire ropes by white metal capping.
6. Bordeaux connections.

FOURTH SCHEDULE

**NOTIFICATION ON BUILDING OPERATIONS/WORKS OF ENGINEERING
CONSTRUCTION**

OSHA 1A



**THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF LABOUR AND EMPLOYMENT
OCCUPATIONAL SAFETY AND HEALTH AUTHORITY**



FOR OFFICIAL USE ONLY			
Appl. Form verified by.....		Registration no.	
Registration fee to be paid		File	
Certificate prepared by		S.B register	
Certificate approved by		C. Index	

Section 16 of the OHS Act 2003 requires that, before any person occupies or uses as workplace or premises which were not occupied or used by him at the commencement of this Act he shall apply for the registration such premises by sending to the Chief Inspector a written notice containing the particulars set out in the First Schedule to the Act. This form may be used for the purpose. When completed, it should be sent to the Chief Inspector. When necessary the completed application form may be submitted to the Chief Inspector through OSHA Zonal office or Area labour office.

**APPLICATION FOR REGISTRATION OF BUILDING OPERATIONS OR WORKS OF ENGINEERING
CONSTRUCTION**

1. Name of the
 - 1.1 Client
 - 1.2 Contractor.....
 - 1.3 Consultant
2. Please tick (√) one.
 - 2.1. State whether the main Contractor ☐ or Subcontractor ☐
 - If it's the Subcontractor give the name of the main contractor.....
 - 2.2. Type: B ☐ C ☐ E ☐ M ☐ SPB ☐ SPC ☐ SPE ☐ SPM ☐
(Legend: B=Building, C=Civil Works, E=Electrical, M=Mechanical, SP=Specialist in B, C, E, or M)
 - 2.3 Class:.....
 - 2.4 The Client Building permit number.....
1. The address of the registered office (in case of business)

P.O Box.....	Cell.....	Tel.....
Region.....	Email.....	Fax.....
District.....	Plot number.....	
Street/village.....	Block number.....	
2. Location where operations/work are carried on

Region.....	Email.....
District.....	Plot number.....
Street/village.....	Block number.....

All correspondence should be addressed to the Chief Executive
P.O. Box 519, Tel: +255 -22 2760548 Fax: (0) 22 - 2760552 Dar Es Salaam, Tanzania

Occupational Safety And Health (Building And Construction Industry)

GN. No. 273 (contd.)

3. Total number of persons employed or intended to be employed in the workplace

	Number of employees
Men	
Women	
Under 18	
TOTAL	

4. Appropriate date of commencement of work.....
5. Contract period.....
6. Are the following items used or intended to be used

ITEMS	YES	NO
i. Power/energy eg. electricity		
ii. Scaffold		
iii. Crane		
iv. Hoist		
v. Air Receivers or Compressors		

7. i. Nature of operations or works carried on. Please put tick (✓) where appropriate.

	Industrial building	Commercial/ public building	Dwelling over 3 storey
Construction			
Maintenance			
Demolition			
State other:.....			

8. Contract sum of the whole project undertaking.....

9. DECLARATION

I.....(Name of Authorized person) declared that, to the best of my knowledge, all the facts stated in this application for registration of a workplace are true and correct.

Date.....

.....
Signature of intending occupier and official stamp

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P.O. Box 519, Tel: +255 -22 2760548 Fax: (0) 22 - 2760552 Dar Es Salaam, Tanzania

FIFTH SCHEDULE

GENERAL DUTIES OF CONTRACTORS
(RULE 4)

The contractor to have a general statement of his workplace policy on Occupational safety and health, the policy shall be revised within a period not exceeding three years and the content of the workplace policy to have-

- (a) policy statement;
- (b) policy objectives;
- (c) organization;
- (d) responsibility;
- (e) condition of employment; and
- (f) signature of authorization officer.

SIXTH SCHEDULE

STABILITY OF LIFTING APPLIANCES
(RULE 95)

Status of the crane after erection/removal/adjustment in anchoring/ballasting.

- (a) contractors name and postal address.....
- (b) address or location of the site
- (c) date of inspection.....
- (d) fact on the equipment (stability etc.).....
- (e) other design added after adjustment.....
- (f) maximum load allowed.....

Tested by.....(Inspector/Safety Officer)

Qualification.....

Date.....

SEVENTH SCHEDULE



THE UNITED REPUBLIC OF TANZANIA



Occupational Safety and Health Authority

Occupational Safety and Health (Building and Construction Industry) Rules, 2013
rule 104

Report of Examination – Cranes, Chains, Ropes
and Lifting Gear

See Legal
Requirement
Overleaf

1. Name of Factory Occupier _____

2. Address of premises where Crane or other Lifting Appliance is
situated _____

3. Description of Appliances _____

4. (i) Identification Mark or Number _____
(ii) Safe Working Load (Original) _____

5. Date first taken into use _____

6. (i) Certificate of Test and Examination rule 104 _____
(ii) Certificate issued by _____

7.* (i) Date last annealed _____
(ii) Date last heat treated (if applicable) _____

8. Date of Examination _____

Occupational Safety And Health (Building And Construction Industry)

GN. No. 273 (contd.)

9. Defects found

.....

.....

.....

10. Action taken to remedy such defects

.....

.....

.....

11. Safe Working Load after examination
(Subject to repair, renewals, etc.)

I, hereby declare that am a person approve by the Chief Inspector for the purpose of rule 104,

and that on other lifting appliances described above and this is a true report of
the result of that examination.

Approved Certificate

Signature of approved Inspector

Date

Dar es Salaam,
8th May, 2015

GAUDENTIA M. KABAKA
Minister for Labour and Employment