THE FACTORIES ACT.

Statutory Instrument 220—8.

The Factories (Building Operations and Works of Engineering Construction) (Safety and Health) Special Rules.

Arrangement of Rules.

Rule

PART I—INTERPRETATION AND GENERAL.

- 1. Citation.
- 2. Application.
- 3. Interpretation.
- 4. Obligations.
- 5. Application of Parts of the Act.
- 6. Exemption from conviction of offence.

PART II—SCAFFOLDS AND MEANS OF ACCESS.

- 7. Provision of scaffolds and means of access.
- 8. Supervision.
- 9. Construction and material.
- 10. Maintenance.
- 11. Standards, uprights, ledgers and putlogs.
- 12. Support and stability.
- 13. Trestle scaffolds.
- 14. Cantilever and jib scaffolds.
- 15. Working platforms and working stages.
- 16. Boards and planks in working platforms, gangways and runs.
- 17. Guardrails and toe boards at working places.
- 18. Construction and use of gangways and runs.
- 19. Guardrails for gangways, runs and stairs.
- 20. Ladders.
- 21. Openings in roofs, floors and walls.
- 22. Roof work.

PART III—RAISING AND LOWERING.

Lifting machines, appliances and gear.

- 23. Slewing or travelling motion.
- 24. Drums and pulleys.
- 25. Poles or beams supporting pulley blocks or gin wheels.
- 26. Cranes with derricking jibs.
- 27. Erection of crane.
- 28. Signals.
- 29. Scotch, Guy or Tower Derrick cranes.
- 30. Slings.

Special provisions as to hoists.

- 31. Safety of hoistways.
- 32. Operation of hoists.
- 33. Hoist winches.
- 34. Safe working load.
- 35. Carriage of persons.
- 36. Testing and examination of hoists.

General.

- 37. Carrying of persons by crane.
- 38. Secureness of loads.

PART IV—EXCAVATIONS.

- 39. Safety of excavations.
- 40. Fencing of excavations, etc.
- 41. Access.

PART V—DEMOLITION.

42. Demolition of buildings and structures.

PART VI—MISCELLANEOUS.

- 43. Lighting.
- 44. Mechanical transport.
- 45. Tramways and transport on rail tracks.

- 46. Protection from falling material.
- 47. Loose materials.
- 48. Construction of temporary structures.
- 49. Avoidance of danger from collapse of structure.
- 50. Petrol.
- 51. Electricity.
- 52. Prevention of drowning.
- 53. First aid.
- 54. Protection of the eyes.
- 55. Registers, certificates, etc.
- 56. British Standards and British Pharmaceutical Codex.

Schedules

First Schedule Specifications for timber ladders not

complying with the prescribed British

Standard.

Second Schedule Hand signals to be used when raising or

lowering.

Third Schedule First-aid equipment.

Fourth Schedule Processes requiring the provision of

suitable goggles or effective screens.

THE FACTORIES ACT.

Statutory Instrument 220—8.

The Factories (Building Operations and Works of Engineering Construction) (Safety and Health) Special Rules.

(Under sections 52(2) and 59 of the Act.)

PART I—INTERPRETATION AND GENERAL.

1. Citation.

These Rules may be cited as the Factories (Building Operations and Works of Engineering Construction) (Safety and Health) Special Rules.

2. Application.

- (1) Subject to section 4(10) of the Act, these Rules shall apply to building operations and works of engineering construction where undertaken by way of trade or business or for the purpose of any industrial or commercial undertaking.
- (2) If the chief inspector is satisfied that in the case of any particular class or description of plant or of any special description or method of work the application of the requirements of these Rules relating to safety or health is, in any class or description of circumstances, not necessary or not reasonably practicable, he or she may by statutory instrument grant an exemption from that requirement in the case of that class or description of plant or of that special description or method of work in such circumstances and subject to such conditions as may be specified in the instrument.

3. Interpretation.

In these Rules—

- (a) "hoist" means a lifting machine, whether worked by mechanical power or not, with a carriage, platform or cage the direction of movement of which is restricted by a guide or guides;
- (b) "ladder" does not include stepladder;
- (c) "scaffold" means any temporary structure or appliance on or from which persons perform work in connection with an operation to

which these Rules apply, and any temporary structure or appliance which enables persons to obtain access to or which enables material to be taken to any place at which the work is performed and includes any working platform, gangway, run, ladder or stepladder (other than an independent ladder or stepladder which does not form part of such a structure) together with any guardrail, toe board or other safeguards and all fixings;

- (d) "trestle" includes a stepladder, tripod or similar movable contrivance which is in itself stable;
- (e) "trestle scaffold" means a scaffold in which the boards or planks of the platform are supported directly on trestles;
- (f) "working platform" includes a working stage.

4. Obligations.

- (1) Every contractor and employer of workers who is undertaking any of the operations or works to which these Rules apply shall comply with the requirements of these Rules.
- (2) The provisions of these Rules shall be in addition to and not in substitution for any provision of any Act relating to the safety of the public.

5. Application of Parts of the Act.

The provisions of Part V (Safety (General Provisions)) of the Act, except section 27 (hoists and lifts), section 31 (safe means of access and safe place of employment), section 39 (prevention of fire) and section 40 (safety provisions in case of fire) shall apply, *mutatis mutandis*, to operations and works to which these Rules apply and shall have effect as if any place where such operations or works are carried on were a factory and any person undertaking or carrying on any of those operations or works were the occupier of a factory.

6. Exemption from conviction of offence.

If it can be shown to the satisfaction of a court that it was not practicable at any time or to any extent to comply with any requirement of these Rules, no person shall be convicted of any offence of failing to comply with that requirement for the time and to the extent that it was not practicable to comply with it; except that if the requirement is a provision designed to prevent the fall of persons, then this rule shall not apply unless in addition it

can be shown that—

- (a) adequate handhold or foothold was provided;
- (b) suitable safety nets or safety sheets were provided and used; or
- (c) safety belts or other contrivances which so far as practicable enabled the workers to carry out their work without risk of serious injury were provided and the workers were instructed to use them.

PART II—SCAFFOLDS AND MEANS OF ACCESS.

7. Provision of scaffolds and means of access.

- (1) Adequate suitable and safe scaffolds shall be provided and used for all work which cannot safely be done on or from the ground or from any part of the building, or from any part of a permanent structure or from a ladder.
- (2) Sufficient safe means of access shall so far as is reasonably practicable be provided and used to every place at which any person is required to work.

8. Supervision.

No scaffold shall be erected or be substantially altered or added to or be dismantled except under the immediate supervision of a responsible person having adequate experience of the work.

9. Construction and material.

- (1) Every scaffold and every part of it shall be of good construction, of suitable and sound material and of adequate strength for the purpose for which it is used.
- (2) Timber used for a scaffold shall be in good condition and have the bark completely stripped off.
- (3) Metal parts used for a scaffold shall be in good condition and free from corrosion or other patent defect likely to affect their strength.

10. Maintenance.

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

11. Standards, uprights, ledgers and putlogs.

- (1) Standards or uprights shall be vertical or lean slightly towards the building or structure.
 - (2) Standards or uprights shall be spaced—
 - (a) not more than six feet apart in masons' heavy duty scaffolds;
 - (b) not more than eight feet apart in bricklayers' or putlog scaffolds; and
 - (c) not more than ten feet apart in painters' or light duty scaffolds.
- (3) Ledgers shall be as nearly as possible horizontal and shall be securely fastened to the uprights.
- (4) Putlogs shall be straight and shall be securely fastened to the tops of the ledgers or to the uprights.
 - (5) Ledgers and putlogs shall not be fastened by nails.

12. Support and stability.

- (1) Every scaffold shall be securely supported or suspended and shall be sufficiently and properly strutted or braced to ensure stability and unless it is properly designed and constructed as an independent and stable scaffold, shall be securely anchored to the building or structure.
- (2) Loose bricks, drainpipes, deformed or unsound drums or other unsuitable materials shall not be used for the construction or support of any scaffold extending to more than two feet above the ground or floor on which it is erected.

13. Trestle scaffolds.

- (1) No trestle scaffold shall be used—
- (a) if it is constructed of more than one tier:
- (b) if it has a working platform more than ten feet above the ground or floor on which it is erected; or

- (c) unless each trestle rests on firm and level ground or flooring.
- (2) No trestle scaffold shall be erected on a scaffold platform unless the trestles or uprights are adequately secured or braced to prevent displacement.
 - (3) No trestle scaffold shall be erected on a suspended scaffold.
- (4) In any timber trestle any cross-member or rung used to support a platform shall be securely mortised or notched in the uprights and shall not depend for its support solely on nails, screws, spikes or other similar fixing.

14. Cantilever and jib scaffolds.

No cantilever or jib scaffold shall be used unless it is securely fixed and anchored from the inside.

15. Working platforms and working stages.

- (1) Subject to subrule (2) of this rule, every working platform from which a person may fall more than six feet six inches shall be closely boarded, planked or plated and at least seventeen inches wide.
- (2) Subject to the subrule (3) of this rule, if the platform is used for the deposit of materials, it shall be at least thirty-four inches wide.
- (3) The requirement contained in subrule (2) of this rule shall not apply to—
 - (a) a working platform on the outside of any sloping roof;
 - (b) the platform of a suspended scaffold or of a trestle scaffold;
 - (c) a platform under a roof and supported by roof members and used only for the purpose of painting or glazing or other light work.

16. Boards and planks in working platforms, gangways and runs.

- (1) Subject to subrule (2) of this rule, every board or plank forming part of a working platform—
 - (a) shall be not less than eight inches wide or in the case of boards or planks exceeding two inches in thickness, not less than six inches wide;
 - (b) where the distance between successive putlogs or supports does

- not exceed three feet three inches shall be not less than one and a quarter inches in thickness;
- (c) where the distance between successive putlogs or supports exceeds three feet three inches but does not exceed five feet shall be not less than one and a half inches in thickness;
- (d) where the distance between successive putlogs or supports exceeds five feet but does not exceed eight feet six inches shall be not less than two inches in thickness; and
- (e) where the distance between successive putlogs or supports exceeds eight feet six inches shall be not less than three inches in thickness.
- (2) Subrule 1(b) to (e) of this rule shall not apply in the case of a platform used by only one person engaged on light work and on which materials are not deposited.
- (3) Every board or plank which forms a part of a working platform, gangway or run—
 - (a) shall rest securely and evenly on its supports; and
 - (b) shall not project beyond its end support to a distance exceeding four times its thickness.

17. Guardrails and toe boards at working places.

Every side of a working platform or working place being a side thereof from which a person may fall more than six feet six inches shall be provided with a suitable strong guardrail or guardrails to a height of at least three feet and with toe boards up to a height of not less than eight inches; except that this rule shall not apply to trestle scaffolds.

18. Construction and use of gangways and runs.

- (1) Every gangway or run from any part of which a person may fall more than six feet six inches shall be closely boarded, planked or plated and shall be at least seventeen inches wide; but if any such gangway or run is used for the passage of materials it shall be at least twenty-five inches wide.
- (2) All planks forming a gangway or run shall be so fixed and supported as to prevent undue or unequal sagging.

19. Guardrails for gangways, runs and stairs.

All gangways, runs and stairs from which a person may fall more than six feet six inches shall be provided with suitable strong guardrails at or as near as possible to a height of three feet above the gangway, run or stair.

20. Ladders.

- (1) Every ladder shall be of good and rigid construction, sound material and adequate for the purpose for which it is used, and shall have evenly spaced rungs not more than twelve inches apart.
 - (2) Timber ladders more than six feet long shall comply either—
 - (a) with British Standard 1129:1960 (which shall be read together with amendment P.D. 4289, 30th August, 1961) or any prescribed British Standard subsequently published in revision of or substitution for them together with any amendments to any such British Standard as may be prescribed to be read with them and with the modification that the species of timber listed in paragraph 1 of the First Schedule to these Rules shall be added to the species of timber listed in clause 3 of that Standard; or
 - (b) being a ladder of less than twenty feet in length and constructed by a contractor or other person for his or her own use, with the provisions of the First Schedule to these Rules.
 - (3) No ladder shall be used which has—
 - (a) a missing or defective rung; or
 - (b) any rung which depends for its support solely on nails, screws, spikes or other similar fixing.
- (4) Ladders shall not stand on loose bricks or other loose packing, but shall have a firm and level footing.
 - (5) Every ladder shall—
 - (a) be secured where necessary to prevent undue swaying or sagging;
 - (b) be equally and properly supported on each upright.
- (6) Where a ladder is used as a means of communication the ladder shall rise, or adequate handhold shall be provided, to a height of at least three feet six inches above the place of landing.
 - (7) Every ladder—

- (a) shall be securely fixed at its top point of rest; or
- (b) if fastening at the top point of rest is impracticable shall have a person stationed at the foot to prevent slipping,

except that this subrule shall not apply to a ladder less than twelve feet 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.

21. Openings in roofs, floors and walls.

- (1) Every accessible opening in a roof or in a floor of a building, or working platform, working place, gangway or run, and every accessible opening in a wall which is less than two feet three inches above the floor, platform or working place being an opening through which a person may fall more than six feet six inches shall be fitted with—
 - (a) a covering to prevent the fall of persons, materials or tools through the opening; or
 - (b) suitable strong guardrails to a height of at least three feet above the edge of the opening together with suitable toe boards at least eight inches high.
- (2) When work is done on or over open joisting the joisting shall be covered over where and to the extent necessary to afford safe access or foothold and to prevent persons failing through the joisting.

22. Roof work.

- (1) When work is done on the outside of any roof which has a pitch of more than thirty-four degrees or is slippery—
 - (a) sufficient and suitable crawling ladders or crawling boards, which shall be secured as soon as practicable, shall be provided and used; and
 - (b) arrangements shall be made to prevent any person employed on the roof from falling more than six feet six inches from the edge of the roof.
- (2) When workers work or pass on, over or near any roof covering or ceiling of glass or asbestos cement or of other fragile materials through which a person may fall more than ten feet—
 - (a) suitable and sufficient ladders, duck ladders or crawling boards which shall be securely supported shall be provided and used; or
 - (b) such other effective measures shall be taken as will prevent the

fall of persons through any such roof covering or ceiling.

PART III—RAISING AND LOWERING.

Lifting machines, appliances and gear.

23. Slewing or travelling motion.

On every stage, gantry or other place where a lifting machine having a travelling or slewing motion is used, an unobstructed passageway not less than two feet wide shall be maintained between any part of the machine liable so to move and any guardrails, fencing or other nearby fixture.

24. Drums and pulleys.

- (1) Every drum or pulley around which the chain or wire rope of any lifting appliance or lifting machine 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 machine shall be properly secured to it, and at least two turns of the chain or rope shall remain on the drum in every operating position of the machine.

25. Poles or beams supporting pulley blocks or gin wheels.

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

- (a) is adequately secured at not less than two points;
- (b) is not supported on a part of a scaffold which also serves as a ledger or putlog; and
- (c) if secured only to a scaffold, is secured to at least two standards or extension poles of that scaffold.

26. Cranes with derricking jibs.

On every crane having a derricking jib there shall be provided and maintained an effective interlocking arrangement of sound construction between the derricking clutch and the pawl sustaining the derricking drum, except where—

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

27. Erection of crane.

A crane shall not be erected except under the supervision of a responsible and experienced person.

28. Signals.

- (1) If the person operating a lifting appliance or lifting machine has not a clear and unrestricted view of the load throughout the operation, except at any place where such view is not necessary for safe working, there shall be appointed and suitably stationed sufficient competent persons to transmit operating signals to the operator.
- (2) Every signal given for the movement or stopping of a lifting appliance or lifting machine shall be distinctive in character and such that the person to whom it is given is able to hear or see it clearly. When hand signals are used they shall be the signals shown and described in the Second Schedule to these Rules.

29. Scotch, Guy or Tower Derrick cranes.

- (1) The requirements of this rule shall except as otherwise specified apply only to all Scotch Derrick, Guy Derrick or Tower Derrick cranes.
- (2) The whole of the appliances for the anchorage of a crane shall be examined by a responsible and experienced person on each occasion before the crane is erected.
- (3) Every crane shall after each erection and before use be tested *in situ* for anchorage by a responsible and experienced person, by the imposition on each anchorage of the maximum uplift or pull exerted either—
 - (a) by a load of 25 percent above the maximum load to be lifted by the crane as erected; or
 - (b) by a less load arranged to exert an equivalent pull on the anchorage.
 - (4) A written report of the test, signed and dated by the person

undertaking the test and specifying the distinctive number of the crane, a precise description of the place of erection and the maximum load to be lifted by the crane as erected shall immediately be made and kept readily available for inspection.

- (5) If the maximum load specified in the report mentioned in subrule (4) of this rule as the maximum load to be lifted by the crane as erected is less than the safe working load of the crane, the safe load indicator shall be suitably altered.
- (6) The jib of a Scotch Derrick crane shall not be erected between the back stays of the crane.
- (7) No load which lies in the angle between the back stays of a Scotch Derrick crane shall be moved by that crane.

30. Slings.

- (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 shall be used for raising, lowering or suspending any load.

Special provisions as to hoists.

31. Safety of hoistways.

- (1) The hoistway of every hoist shall at all points at which there is access to the hoistway and at which persons may be struck by any moving part of the hoist be efficiently protected by a substantial enclosure, fence or barrier which effectively prevents any person or any part of a person from being struck by any moving part of the hoist.
- (2) Subrule (1) of this rule shall not apply to any point at which access to the hoistway is for the time being necessary for the purpose of loading or unloading goods, plant or material.

32. Operation of hoists.

- (1) The construction and the installation arrangements of every hoist shall at any one time be such that it can be operated only from the cage or only from one other position, and a hoist shall not be operated from the cage unless the requirements of rule 35 of these Rules are complied with.
- (2) If the person operating a hoist has not a clear and unrestricted view of the platform or cage at any stopping point, then effective arrangements shall be made by signallers or otherwise to enable him or her to stop the platform or cage at the appropriate level.

33. Hoist winches.

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, handle 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 lowered.

34. Safe working load.

- (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 the authorised person appointed to carry out the test may authorise.
- (2) In the case of a hoist used for carrying persons the maximum number of persons to be carried at any time shall also be so marked, and a greater number of persons shall not be so carried.

35. Carriage of persons.

- (1) No person shall ride on a hoist unless—
- (a) there are provided and maintained efficient devices which will support the platform or cage together with its safe working load in the event of failure of the hoisting rope or any part of the hoisting gear; and
- (b) there are provided and 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.

(2) Where any hoist is not fitted with all the devices mentioned in subrule (1) of this rule, a large and readily legible notice shall be exhibited on the platform or cage stating in English, Luganda and Kiswahili that the carriage of persons is prohibited.

36. Testing and examination of hoists.

No hoist shall be used unless—

- (a) it has been tested and thoroughly examined either by an authorised person or by the manufacturer and there has been obtained a certificate of the test and examination, signed by the person making or responsible for carrying out 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 maximum number of persons to be carried at one time;
- (b) it has been thoroughly examined by an authorised person at least once within the previous six months; and
- (c) a report of the results of any examination required by paragraph (b) of this rule in such form and including such particulars as may be prescribed and signed by the person making the examination has been obtained and is kept readily available for inspection.

General.

37. Carrying of persons by crane.

No person shall be raised, lowered or carried by a crane except on the driver's platform.

38. Secureness of loads.

- (1) Every part of a load shall be securely suspended or supported while being raised or lowered and shall be adequately secured to prevent danger from slipping or displacement.
- (2) No load shall be left suspended from a lifting appliance or lifting machine unless an experienced person is actually in charge of the appliance or machine.

PART IV—EXCAVATIONS.

39. Safety of excavations.

- (1) Sides of excavations or earthworks shall not be undercut unless adequate and suitable support is provided for the material undercut; except that this subrule shall not apply to any necessary undercutting made by a mechanical shovel or other mechanical appliance if effective steps are taken to ensure that no person can be injured if the overhang should collapse.
- (2) Subject to subrule (3) of this rule, any side of an excavation or earthwork in alluvial soil, soft rock, gravel, clay, ashes, debris or other weak ground shall not exceed eight feet in height or, in the case of trenches less than four feet wide, shall not exceed five feet in height, unless it is securely timbered or shuttered so as to prevent, so far as is practicable and as early as is practicable, danger to any person employed from a fall or dislodgement of the material forming the side of or adjacent to any excavation or earthwork.
- (3) The requirement of subrule (2) of this rule shall not apply to any side of an excavation or earthwork which is worked in terraces of less than eight feet in height or at a safe angle of slope.

40. Fencing of excavations, etc.

Every accessible part of an excavation, pit or opening in the ground (other than a trench) into or down the side of which a person employed is liable to fall a vertical distance of more than six feet six inches shall be provided with a suitable barrier to a height of at least two feet and as close as is reasonably practicable to the edge.

41. Access.

In every excavation, pit or opening in the ground sufficient safe means of access and exit shall be provided for every place where persons are employed.

PART V—DEMOLITION.

42. Demolition of buildings and structures.

(1) All demolition operations shall be carried out under the immediate supervision of a responsible person adequately experienced in the

operations concerned.

- (2) Before demolition is commenced and also during the progress of the work, no electric cable or apparatus which is liable to be a source of danger, other than a cable or apparatus used for the operation, shall remain electrically charged.
- (3) Before demolition is commenced and also during the progress of the work, precautions shall, where necessary, be taken by adequate shoring or otherwise to prevent the accidental collapse of any part of the building or of any adjoining building.
- (4) Every place where demolition work is being carried on shall be so fenced off as to prevent the approach of unauthorised persons and the risk of injury to those persons.

PART VI—MISCELLANEOUS.

43. Lighting.

All places where persons may work or pass shall be adequately lighted.

44. Mechanical transport.

Mechanically propelled vehicles and mechanically drawn trailer vehicles shall—

- (a) be maintained in efficient working order and in good repair and shall not be used in an improper manner;
- (b) not be used to carry a load greater than the authorised payload of the vehicles; and
- (c) not be so loaded as to interfere with the safe driving or operation of the vehicle.

45. Tramways and transport on rail tracks.

- (1) All rails on which any locomotive, truck, wagon or travelling crane moves shall—
 - (a) be of adequate section and have an even running surface;
 - (b) be jointed by fish plates or double chairs; and
 - (c) be securely fastened to sleepers or bearers.

- (2) The whole track, whether resting on the ground or raised above it, shall be properly laid, and any supports shall be of sufficient strength and maintained in good condition.
- (3) Every rail track shall be provided at each end with adequate stop blocks or buffers.
- (4) Every locomotive, wagon or truck in use shall be properly maintained.

46. Protection from falling material.

- (1) Any place at which any person is habitually employed shall be covered in such manner as to protect any person who is working in that place from being struck by any falling material or article.
- (2) Scaffold materials, tools and other objects and material (including waste material) shall not be thrown, tipped or shot down from a height where they are liable to cause injury, but shall be properly lowered; in any place where proper lowering is not practicable and also where any part of a structure is being demolished or broken off adequate steps shall be taken to protect persons employed from falling or flying debris.

47. Loose materials.

- (1) Loose materials, when not required for use, shall not be placed or left so as to impede the passage of persons upon platforms, gangways, floors or other places on the site used for the passage, but shall be removed, stacked or stored so as to leave those places free from obstruction.
- (2) Materials shall not be insecurely stacked, or so stacked as to overload and render unsafe any floor, roof or other part of a building.

48. Construction of temporary structures.

Any temporary structure, propping or shuttering erected for the purpose of operations or works to which these Rules apply shall be of good construction, sound material and adequate strength and stability, having regard to the purpose for which it is used.

49. Avoidance of danger from collapse of structure.

- (1) All practicable precautions shall be taken by the use of temporary guys, stays, supports or fixings or where necessary by other means to prevent the collapse of any part of a structure during any temporary state of weakness or instability of the structure or any parts of the structure before it is completed.
- (2) Where any work is carried on which is likely to reduce the security or stability of any part of an existing building or structure or of a building or structure in course of construction, all practicable precautions shall be taken by shoring or otherwise to prevent the accidental collapse of the building or the accidental fall of any part of it.

50. Petrol.

- (1) Petrol or motor spirit shall be kept or stored in accordance with those requirements of the Petroleum (Spirit) (Licensing, Testing and Possession) Rules, or any rules replacing those rules, which relate to petroleum spirit.
- (2) Petrol or motor spirit shall not be used for cleaning or as a solvent.
- (3) Petrol or motor spirit shall not be decanted from drums and shall not be removed or dispensed from drums or tanks except by means of a suitable pump or tap which permits the outflow to be properly controlled.

51. Electricity.

- (1) Within the precincts of any operations or works to which these Rules apply all live overhead conductors at a voltage normally exceeding extra low voltage provided and used for the purposes of or incidental to the operations or works, whether of a public supply or provided by any contractor or employer of workers, shall be so covered with insulating material, or so guarded and installed, as to prevent in particular such danger as may be caused by any contact with the conductors attendant upon the manipulation of crane jibs, metal scaffolding parts, metal ladders and other objects which may be made live by that contact.
- (2) In any locality supplied with electricity by a public supply, any person proposing to undertake any operations or works to which these Rules

apply shall, before the operations or works are commenced, ascertain whether any live conductor at a voltage normally exceeding extra low voltage, whether overhead or underground, passes within the vicinity of the proposed operations or works; and if any such conductor does pass within the vicinity of the operations or works, whether the conductor is the property of the public supplier or of any other person, the person proposing to undertake the operations or works shall immediately notify the public supplier and the owner of the conductor in writing of his or her intention to commence those operations or works and of the nature of the operations or works and the precise place at which they are to take place.

- (3) On receipt of the notice under subrule (2) of this rule, with which shall be furnished such further information as to the nature and situation of the conductor as he or she may require, the public supplier shall issue such directions as he or she considers necessary to prevent danger from contact with the conductor while live; and no person shall employ any person at those operations or works unless those directions are complied with; but—
 - (a) if in any case where the directions of the public supplier have been complied with, any person suffers loss or bodily injury by reason of any contact with a conductor while live, the public supplier shall not be liable in respect of the loss or injury solely by reason of the fact that the directions although compiled with did not prevent danger; and
 - (b) any person who undertakes any operations or works to which these Rules apply shall not avoid liability for loss or bodily injury resulting from contact with any conductor while live solely by reason of the fact that he or she complied with the directions issued by the public supplier.
- (4) In this rule, "conductor", "covered with insulating material", "danger", "extra low voltage", "live" and "public supply" have the same meanings as in the Factories (Electricity) Special Rules, and "public supplier" shall be construed accordingly.

52. Prevention of drowning.

(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 or her employment liable to fall with risk of drowning, suitable rescue equipment shall be provided and kept ready for use; and steps shall be taken to arrange for the prompt rescue of any such person in danger of

drowning.

(2) Where appropriate and reasonably practicable, fencing not less than three feet in height shall be erected near the water to prevent the fall.

53. First aid.

- (1) At any site where more than fifteen persons are employed in operations or works to which these Rules apply there shall be provided and maintained so as to be readily accessible a first-aid box or cupboard to the standard set out in the Third Schedule to these Rules; but this subrule shall not apply to any operations or works which in the normal course of events will be completed in less than three days.
- (2) Where required by the chief inspector at any site where more than one hundred persons are employed at any time in operations or works to which these Rules apply, there shall be provided and available ready for use at the site—
 - (a) such stretchers of a pattern approved by the chief inspector as the chief inspector may order; and
 - (b) a vehicle approved by the chief inspector as suitable for the transport of injured persons on stretchers.

54. Protection of the eyes.

Where there is carried on any process specified in the Fourth Schedule to these Rules, suitable goggles or effective screens shall be provided to protect the eyes of the persons employed in the process.

55. Registers, certificates, etc.

Registers, reports and certificates required by these Rules shall at all reasonable times be open to inspection by any inspector; and the person keeping any register, report or certificate shall send to any such inspector such extracts from the registers, reports and certificates or copies of those documents as the inspector may from time to time require for the purpose of the execution of his or her duties under these Rules.

56. British Standards and British Pharmaceutical Codex.

In any legal proceedings arising out of these Rules a copy of British Standard

1129:1960 or any British Standard published in revision of it or in substitution for it, including any amendment to any such British Standard, purporting to be printed or published by or by the authority of the British Standards Institution and a copy of the British Pharmaceutical Codex purporting to be printed or published by the authority of the Council of the Pharmaceutical Society of Great Britain shall be prima facie evidence of the terms and provisions of such British Standard or amendment to it or of the British Pharmaceutical Codex.

SCHEDULES

First Schedule.

rule 20(2).

Specifications for timber ladders not complying with the prescribed British Standard.

Species.

1. The timber used for stiles or rungs shall be selected from the following species—

wing species			
(a) for stiles—			
Standard name	Trade name	Botanical name	
African mahogany ¹	Munyama	Khaya anthotheca	
Albizzia	Red nongo	Albizzia zygia	
Celtis	Lufugo	Celtis soyauxii	
E.A. pencil cedar	_	Juniperus procera	
E.A. camphorwood	_	Ocotea usambarensis	
Musizi	_	Maesopsis eminii	
White star apple	Mululu	Chrysophyllum albibum	
(b) for rungs—			
Standard name	Trade name	Botanical name	
Albizzia	Red nongo	Albizzia zygia	
Celtis Lufugo		Celtis soyauxii	
E.A. olive	Mululu	Chrysophyllum albibum	
Muhimbi	_	Cynometra alexandri	
White star apple	_	Olea hochstetterii	

¹There are several mahoganies indigenous to East Africa but only Khaya is suitable. It should be stressed that the Entandrophragma mahoganies are *not* suitable.

General.

2. All timber parts shall be of adequate strength, free from patent defect, seasoned, dressed and free from splinters and sharp edges.

Grain.

3. The inclination of the grain in any component, excluding slight local deviations, shall not exceed 1 in 10.

Distance between stiles.

4. (1) The width between the inner surfaces of the stiles at any point shall be in accordance with the following table—

Distance below top of ladder	Width
0'	9"
5' 10'	9½" 10"
15'	10½"
20'	11"

(2) A uniform tolerance of zero to plus 3" shall be allowed in the widths specified in the table set out in subparagraph (1) of this paragraph.

Dimensions of stiles.

- 5. (1) Stiles shall be not less than 1%" and not more than 1%" wide and shall not be less than 3%" and not more than 3%" deep.
 - (2) Each stile shall be of one piece without join or splice.

Rungs.

- 6. (1) Rungs shall be not less than $\frac{7}{6}$ " and not more than $\frac{1}{2}$ " thick and shall be not less than $\frac{2}{2}$ " and not more than $\frac{3}{4}$ " deep.
 - (2) Rungs shall be evenly spaced at spacings between tops of rungs

of not less than 8" and not more than 12".

- (3) Rungs shall be let into or notched into the front faces of the stiles for $\frac{1}{2}$ " so that the bottom of each end of a rung rests firmly on the timber of the stile.
- (4) The surfaces of rungs shall fit snugly against the surfaces of the housings or notches in the stiles.
- (5) Rungs shall be securely nailed, screwed or bolted to the stiles at not less than two places at each end of a rung.

Finish.

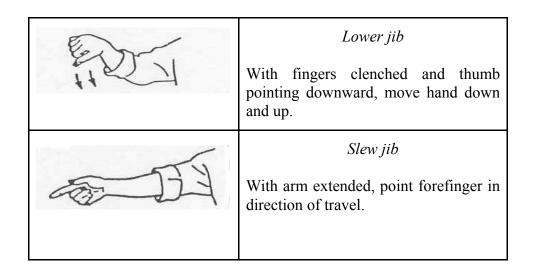
- 7. (1) All ladders shall be soundly constructed and shall be wrought on all surfaces, smoothly finished and free from twist or wind.
- (2) Ladders shall not be painted or so treated that defects cannot easily be seen.

Second Schedule.

rule 28(2).

Hand signals to be used when raising or lowering.

	Hoist load With forearm vertical and forefinger pointing upwards, move hand in a horizontal circle.
THE THE	Lower load With arm extended and palm downwards, wave hand down and up.
	Stop With arm extended and palm downward, hold position rigidly.
WE TI	Emergency stop With arm extended and palm downward, move arm rapidly to right and left.
道道。	Raise jib With fingers clenched and thumb pointing upward, move hand up and down.



Third Schedule.

rule 53.

First-aid equipment.

- 1. In this Schedule, B.P.C. means British Pharmaceutical Codex.
- 2. Each first-aid box or cupboard shall contain at least—
 - (a) a copy of the first-aid leaflet (L.D. Form F. 61) issued by the labour department;
 - (b) twelve finger dressings B.P.C. or twelve small elastic adhesive wound dressings B.P.C.;
 - (c) six medium medicated wound dressings B.P.C. or six medium elastic adhesive wound dressings B.P.C.;
 - (d) six large medicated wound dressings B.P.C. or six large elastic adhesive wound dressings B.P.C.;
 - (e) six small burn dressings B.P.C.;
 - (f) two medium burn dressings B.P.C.;
 - (g) one large burn dressing B.P.C.;
 - (h) three ½-ounce cartons of cotton wool B.P.C.;
 - (i) one ounce of antiseptic solution;
 - (j) one ounce of factory eye-drops B.P.C.;
 - (k) one camel-hair brush.
- 3. At any site where more than 100 persons are employed at any time in operations or works to which these Rules apply, each first-aid box or

cupboard shall in addition to the items listed in paragraph 2 of this Schedule contain—

- (a) a tourniquet;
- (b) twelve roller bandages of 2" width or wider;
- (c) twelve triangular bandages;
- (d) a supply of safety pins;
- (e) a pair of scissors;
- (f) a pair of forceps;
- (g) a lotion bowl or dish;
- (h) a supply of suitable splints and material for padding;
- (i) four blankets.

Fourth Schedule.

rule 54.

Processes requiring the provision of suitable goggles or effective screens.

- 1. Cutting, dressing or carving of stone, concrete or similar material
- 2. Chipping or scaling of painted or corroded metal surfaces or wire-brushing of those surfaces
- 3. Cutting out or cutting off of cold rivets or bolts
- 4. Welding or cutting of metals by means of an electrical, oxyacetylene or similar process
- 5. The spraying of any hot bitumen, bituminous compound or tar
- 6. Sand blasting
- 7. Cement spraying
- 8. The use or manipulation of quicklime

History: S.I. 198-17.

Cross References

British Pharmaceutical Codex.
British Standard 1129:1960.
Factories (Electricity) Special Rules, S.I. 220-12.
Petroleum (Spirit) (Licensing, Testing and Possession) Rules, S.I. 149-1.