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[1964

INSPECTION OF SCAFFOLDING ACT, 1924-1962.

Department of Labour, Perth, 5th August, 1964.

HIS Excellency the Governor in Executive Council, acting pursuant to the powers conferred by the Interpretation Act, 1918-1962, and by the Inspection of Scaffolding Act, 1924-1962, has been pleased—

- (a) to revoke the Inspection of Scaffolding Act Regulations, 1950, as amended, from time to time; and
- (b) to make the regulations set out in the schedule hereunder.

C. A. REEVE, Secretary for Labour.

Schedule. Regulations.

PART I—PRELIMINARY.

- 1. These regulations may be cited as the Scaffolding Regu- $^{\rm Citation}$. lations, 1964.
 - 2. These regulations are divided into Parts as follows:-

Arrange-

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Interpretation.

3. (1) In these regulations, unless the context otherwise requires-

"approved" means approved by the Chief Inspector;

"Chief Inspector" means the Chief Inspector of Scaffolding appointed under the Act; and

"Inspector" means an Inspector so appointed;

"regulation" means one of these regulations;

"Schedule" means the Schedule to these regulations;

"the Act" means the Inspection of Scaffolding Act, 1924, as amended.

- (2) In these regulations, unless the context otherwise requires, technical terms not otherwise defined have the respective meanings ordinarily ascribed to them, by the building industry.
- (3) For the purposes of the Act and of these regulations, the following are mechanical gear, that is to say-

carborundum cutting saws; circular saws; concrete mixers; explosive powered tools; hoists; skip hoists; tower hoists: winches.

PART II-INSPECTIONS, INQUIRIES AND FEES.

4. A certificate of the appointment of a person as an Inspector, under the Act, may be in the form of Form A in the Schedule.

Inspectors'

5. (1) Where an Inspector examines a person, pursuant to the powers conferred by section 7 of the Act, he shall reduce that person's answers to writing and shall read the answer, as so recorded, back to the person making them.

Examination of persons under s. 7 of the Act

- (2) Both the Inspector and the person being examined shall initial any alteration made in the record of answers and both shall sign each page of the record.
- 6. (1) Subject to subregulations (2) and (3) of this regulation, a person, being the owner of, or having the use (other than as a workman), control, charge or management of, scaffolding or gear, shall not—

Notices to be given of intention to erect or use scaffolding or gear.

- (a) erect the scaffolding, or any of it, to a height exceeding6 ft.; or
- (b) use any of the scaffolding erected to a height exceeding 6 ft.; or
- (c) use the gear, or any of it-
 - (i) on a scaffold or works erected, or intended to be erected, to a height exceeding 6 ft.; or
 - (ii) in, or in connection with, an excavation, exceeding, or intended to exceed, a depth of 6 ft.; or
- (d) permit or suffer anything mentioned in paragraph (a), (b) or (c) of this subsection to be done,

unless he has, at least 48 hours prior to the commencement of the erection or use, given to the Chief Inspector notice, in the form of Form D in the Schedule, of his intention in that regard and has paid the fees prescribed by regulation 7.

- (2) Where a person has (other than as a workman) contracted with the owner or other person having the use, control, charge or management of scaffolding or gear, to use the scaffolding or gear, or any of it, he is exempt fro mthe provisions of subregulation (1) of this regulation if the owner or other person has, by notice under that subregulation, already given notice of that fact and has paid the fees applicable to the works to be carried out by the person so contracting, but not otherwise.
- (3) Where a person has contracted, other than in a supervisory capacity only, for the complete performance of any works on which scaffolding is erected or gear is used, he shall, notwithstanding that notice has been given by any other person, as prescribed by this regulation, himself give the notice prescribed by subregulation (1) of this regulation and shall pay such fees as fall to be paid under regulation 7, after taking into account those paid, or to be paid, by any other person.
- (4) The provisions of subregulation (1) of this regulation do not apply to the erection, or use, of scaffolding or gear for works on a one storey dwelling house where no workman is employed or that is outside a radius of 30 miles from the General Post Office, at Perth, or is a farm building.
- (5) In this regulation, "farm building" means a building not exceeding 30 ft. in height, ordinarily used for the housing of stores, grain, implements or animals and situated on land used, or primarily used, for agricultural, horticultural, pastoral, grazing or dairying purposes or any combination of those purposes.
- 7. (1) In this regulation, "dwelling house" means a building used or occupied, or intended to be used or occupied, exclusively as a place of residence; but where a building comprises more than

Inspection fees.

one self-contained unit, let or used, or intended to be let or used, as separate occupancies, each unit is deemed to be a separate dwelling house.

- (2) Subject to regulation 6 and to subregulations (3) and (4) of this regulation, the fee for the inspection of scaffolding, gear, or both, payable to the Chief Inspector by the owner or other person having the use (other than as a workman), control charge or management of the scaffolding or gear, is, where the scaffolding or gear—
 - (a) is erected or used for works on a one storey dwelling house, an amount of three pounds or the amount prescribed by paragraph (b) of this subregulation for scaffolding and gear on other works, whichever is the less;
 - (b) is erected or used for works other than on a one storey dwelling house, an amount of three shillings for every hundred pounds, or portion thereof, of the contract price for the works, or, where there is no contract price, of the estimated cost of the works, up to one and one-third million pounds, and two shillings and sixpence for every thousand pounds in excess of one and one-third million pounds;
 - (c) comprises, in the case of scaffolding, only trestles and planks or swinging stages and, in the case of gear, only such gear as is used by painters, signwriters, plumbers and electricians, an amount of three shillings for every hundred pounds, or portion thereof, of the aggregate cost of all works of which notice has been given pursuant to these regulations, in any financial year, commencing on the 1st July, in any one year, and ending on the 30th June, in the next succeeding year;
 - (d) comprises only such as is used by window cleaners, installers of electric signs and such persons engaged in maintenance and repairs as have given notice, in the form of Form E in the schedule, to, and been verified as being such by, the Chief Inspector, an amount of five pounds, payable annually on the 1st July; and
 - (e) comprises only ladders, slings and mobile cranes, for works not exceeding 30 ft. in height, three shillings for every hundred pounds, or portion thereof, of the aggregate of the charges made for the use of that plant and for the labour engaged in connection therewith
- (3) For the purposes of paragraph (b) of subregulation (2) of this regulation, where a contract comprises separate works in different localities, each of those works shall, as regards its price or estimated cost, be taken as being a separate enterprise.
- (4) Where scaffolding or gear is used for works on a building that is to be used exclusively as a place of worship or by a charitable institution, the Chief Inspector may, on being satisfied of that fact, remit to the building owner half the fees payable under subregulation (2) of this regulation; and any person aggrieved by a decision of the Chief Inspector, made under this subregulation, may appeal to the Minister whose decision shall be final.
- (5) Where any fees payable under this regulation are not paid within the time prescribed by these regulations, they may be recovered as provided by the Act.

PART III—CONSTRUCTION OF SCAFFOLDS.

Division 1.—Metal Tube Construction.

(1) Metal tubes used in the construction of a scaffold shall Materials. be round pipes, of not less than 1 29/32 in. outside diameter, having $\mathbf{1}_2^1$ in. bore and a wall thickness of not less than number 6 British Imperial Standard wire gauge, for tubes of mild steel, or of number 7 British Imperial Standard wire gauge, for tubes of approved alloy.

- (2) Tubes mentioned in subregulation (1) of this regulation shall be such as comply in all other respects with British Standard 1139:1951 (Metal Scaffolding).
- (1) Except as otherwise approved by the Chief Inspector, Fittings. in writing, all fittings and devices used for connecting the several members of scaffolding shall be such as comply with British Standard 1139:1951 (Metal Scaffolding).

- (2) Fittings having screw threads in blind bosses or nuts in which the amount of screw thread is not readily visible shall not be used in the construction of a scaffold.
- (3) The Chief Inspector may demand a manufacturer's or a supplier's certificate that tubes, fittings or other devices are of a kind that comply with the prescribed British Standard and may, in any event, require sufficient specimens of any of those things, for the purpose of testing them.
- (4) Where the Chief Inspector demands a certificate in respect of, or requires specimens of, any article mentioned in subregulation
 (3) of this regulation, an article of the kind in respect of which the demand or requirement is made shall not be used in the construction of a scaffold until the Chief Inspector has been satisfied, by the certificate, test or both, as the case may require, that it is of a kind suitable for use.
- 10. Platform planks used in conjunction with scaffolding Platform constructed pursuant to this Division shall be such as comply planks. with regulation 50.

11. (1) In its general arrangement tubular scaffolding shall comprise a number of verticals (or uprights) to which are connected horizontal members (ledgers), supporting putlogs on which the platform planks are to be laid; and the whole frame, when so assembled, shall be braced, both longitudinally and transversely.

- (2) In any assembly, the height of the topmost platform shall not exceed 150 ft., measured from the base of any vertical, except where provision is made to relieve the loading on the verticals, to the satisfaction of an Inspector.
 - (3) Verticals shall

Verticals.

- (a) be spaced not more than-
 - (i) 6 ft. apart, for masons' scaffolds;
 - (ii) 8 ft. apart, for bricklayers' and plasterers' scaffolds; or
 - (iii) 10 ft. apart, for painters' light scaffolds;
- (b) be erected so that their joints do not occur-
 - (i) at a greater distance than 9 in. from a ledger;
 - (ii) in adjacent panels of the scaffold; or
 - (iii) more than once between any two ledgers;
- (c) be founded on base plates of approved design or on some other approved base construction;
- (d) be straight throughout and be set up truly vertical; and

(e) be provided with suitable guards or fenders, where necessary, to prevent their sustaining damage from any source.

Ledgers.

- (4) Ledgers shall-
 - (a) be supported by, and at, each vertical;
 - (b) be spaced not more than 6 ft. apart, on a vertical;
 - (c) be erected so that their joints do not occur-
 - (i) in adjacent panels of the scaffold; or
 - (ii) at a greater distance than 27 in. from a vertical;
 - (d) except where access is to be provided, be continuous throughout the whole length of the scaffold; and
 - (e) be fixed in a truly horizontal plane.

Putlogs.

- (5) Putlogs shall be without joints and shall-
 - (a) be so placed that-
 - (i) none is more than 9 in. from a vertical, measured from the centre of the vertical to the centre of the putlog;
 - (ii) one is on each side of each vertical, except the vertical at an end of the scaffold, where one may be omitted, and, where, on any level, no working platform is used, each alternate one may be omitted;
 - (iii) their maximum span does not exceed 5 ft., measured between the centres of their supports or, where they are supported at one end by a wall or structure, measured between the centre of the supporting ledger and that wall or structure; and
 - (iv) one is maintained at each end of a ledger;
 - (b) be set horizontally, above the ledgers, so that their top surfaces are in a plane that is parallel to that of the ledgers and provide a true and even support to the platform planks;
 - (c) be of metal, at any height of tubular scaffolding, exceeding 16 ft.; and
 - (d) be adequately fixed in position and, if of wood, be fixed with a fitting, and in a manner, approved by the Chief Inspector.

Bracing.

(6) The whole frame of a tubular scaffold shall be braced and tied back to the building or structure, at least once, in every 12 ft. of the vertical height and in every 30 ft. of the horizontal length, or tied back to the satisfaction of an Inspector.

Platforms.

 $\left(7\right)$ Platform planks shall be closely laid over the required width of the working platforms.

Guard rails.

(8) Guard rails shall be of the metal tube prescribed for scaffolding by regulation 8 and shall be fixed as prescribed by regulation 52.

Fender boards. (9) Fender boards shall be fixed as prescribed by regulation 51.

Access to working platforms. 12. Access to working platforms shall be provided by suitable ladders or such other means to the satisfaction of an Inspector and shall be provided and remain in position while the scaffold is being, and so long as it is, erected.

Permissible

13. (1) No more than two full length working platforms shall be set up and used on a frame constructed pursuant to this Division, but shorter platforms may be set up and used in

different positions on the frame, if the total area of the platforms supported by any vertical does not exceed that supported where two full length platforms are set up.

- (2) The load due to the weight of men and materials uniformly distributed on the area of scaffolding platform shall not exceed 45 lb. per sq. ft. of area, in the case of heavy duty scaffolds, nor 10 lb. per sq. ft. of area in the case of light duty scaffolds.
- (3) The weight of a concentrated load applied to any bay of a scaffold shall not exceed 400 lb. and that load and a distributed load shall not be applied simultaneously.

Division 2-Other Types of Metal Scaffolding.

- 14. (1) The general arrangement and construction of mobile Mobile scaffolds shall be in conformity with subregulation (1) of regula- scaffolds. tion 11.
- (2) The height of a mobile scaffold shall not exceed four times the least width between castors at the base of the scaffold, unless some adequate provision is made, to the satisfaction of an Inspector, to maintain its stability.
- (1) Birdcage scaffolds for internal use by painters and Birdcage decorators shall comply, as to materials, with regulation 8, as to fittings, with regulation 9, as to general arrangement, with subregulation (1) of regulation 11 and, as to assembly with this regu-

scaffolds, material and

- (2) Verticals (standards), if of mild steel, shall be spaced not more than 10 ft. apart, and, if of approved alloy, shall be spaced not more than 9 ft. apart, in any one row.
 - (3) Ledgers shall-
 - (a) be continuous for the full length of the scaffolding frame;
 - (b) be supported by, and at, each vertical; and
 - (c) be placed so that the distance between them, vertically, does not exceed 8 ft.
- (4) Putlogs shall be connected to the ledgers and be placed on each side of, and within 24 in. of, each standard and shall, if of mild steel, have a span not exceeding 8 ft. and, if of approved alloy, have a span not exceeding 6 ft.
- (5) Diagonal bracing either of mild steel or of approved alloy scaffolding shall be such, and be so fixed, as effectively to prevent any longitudinal movement of all putlogs and ledgers and where this can be effected by bracing the putlogs against the building or structure that course may be adopted.
- (6) Platform planks shall be such as comply with regulation 50 and shall not be spaced at more than 9 in. apart.
- 16. No more than one working platform shall be set up on birdcage scaffold, at any one time, and the weight of the concentrated load applied to any bay of a scaffold shall not exceed in the aggregate, the weight of two men and 50 lb. of materials.

17. Any unit frame scaffolding for which no specifications bave been prescribed by these regulations shall not be set up or scaffolding. used, until specifications thereof have been submitted to, and approved by, the Chief Inspector, and then shall be set up and used to the satisfaction of an Inspector.

18. Any scaffolding for which no provision has been made New types of by these regulations shall not be set up or used, until specifications scaffolding. thereof have been submitted to, and approved by, the Chief Inspector, and then shall be set up and used to the satisfaction of an Inspector.

Division 3—Sawn Timber Scaffolding for Bricklayers, Plasterers and Similar Trades.

Materials.

- 19. Sawn timber used in the construction of a scaffold shall be of an approved timber and—
 - (a) standards and ledgers shall be of not less than 4 in. x 2 in.;
 - (b) putlogs of which the span does not exceed 5 ft. in the clear, shall be of approved hardwood of not less than 4 in. x 3 in.; and
 - (c) putlogs of which the span exceeds 5 ft., in the clear, shall be of approved hardwood, of a size to the satisfaction of an Inspector;

and where the scaffold exceeds 12 ft. in height, the standards shall be of such dimensions as may be directed by an Inspector.

Assembly.

20. (1) Sawn timber scaffolding shall comply, as to its general arrangement with subregulation (1) of regulation 11 and, as to its assembly, with this regulation.

Standards.

- (2) Standards shall-
 - (a) be spaced not more than 6 ft. apart;
 - (b) unless an Inspector otherwise directs, be embedded in the ground for a distance of 12 in. and stand upon a satisfactory sole plate; and
 - (c) where comprising more than one length of timber, be doubled from the ground level, lapped and adequately bolted together, to the satisfaction of an Inspector.

Ledgers.

(3) Ledgers, spaced not more than 6 ft. apart, shall be securely bolted to the standards with $\frac{1}{2}$ in. iron bolts, provided with washers, and the first ledger of the scaffold shall be fixed at not more than 6 ft. from the ground, except where access is required through any one bay where the height may be varied to the satisfaction of an Inspector.

Putlogs.

- (4) Putlogs shall-
 - (a) have not less than $4\frac{1}{2}$ in, bearing in a wall or be provided with a metal plate, not less than 2 in, wide and $\frac{1}{4}$ in, in thickness, bolted to the putlog by bolts of not less than 5/16 in, diameter, so that the metal plate protrudes $4\frac{1}{2}$ in, and bears securely on the supporting wall; and
 - (b) be spaced not more than 6 ft. apart, except in the lower stages, where alternate putlogs may be removed, as the scaffold progresses.

Bolts.

(5) Bolts shall, in every case, be provided with washers and shall be kept properly tightened up, so long as the scaffold is erected.

Platform planks. (6) Platform planks shall be such as comply with regulation 50.

Foot planks.

(7) Foot planks, not exceeding 12 in. in height, may be used if their use is approved by an Inspector.

Sawn timber scaffolding for use with barrows.

21. Notwithstanding any other provision of this Division, where barrows are to be used for wheeling bricks on any sawn timber scaffold, the scaffold shall be erected in such manner as an Inspector may direct.

Division 4—Round Hardwood Pole Scaffolds for Bricklayers, Plasterers and Similar Trades.

Materials.

22. (1) Pole scaffolds for the use of bricklayers, plasterers and others, internally or externally, shall in the case of standards and ledgers, be of round hardwood, having a diameter of not less than 4 in. at the butt, and not less than $2\frac{1}{2}$ in. at the tip.

- (2) Putlogs shall be as prescribed for sawn timber scaffolding by regulation 19.
- (3) Ropes shall be of approved quality cordage, of not less than $1\frac{3}{4}$ in., in circumference and 18 ft., in length or be such other ropes as the Chief Inspector may approve.
- 23.~(1) Round hardwood pole scaffolding shall comply, as to its general arrangement, with subregulation (1) of regulation 11 and, as to its assembly, with this regulation.

Assembly.

(2) Standards shall be spaced not more than 9 ft. apart and Standards. shall be erected in such manner as an Inspector may direct; and where the height of a scaffold exceeds 25 ft., all standards shall be doubled from the ground up, lapped and lashed together.

(3) Ledgers shall—

Ledgers.

- (a) be spaced not more than 9 ft. apart and be arranged so that the first of them is not more than 6 ft. from the ground;
- (b) be securely fastened to each standard by not less than 18 ft. of rope; and
- (c) where joined, be lapped not for less than 3 ft. and roped with not less than 18 ft. of rope.
- (4) Putlogs shall be laid in the manner prescribed by subregula- Putlogs. tion (4) of regulation 20, for sawn timber scaffolds.

- (5) Platform planks shall be such as comply with regulation 50. Platform
 - nianks. Fender boards.
- (6) Fender boards shall be such as comply with regulation 51. (7) Guard rails shall be such as comply with regulation 52.
- Guard rails.
- (8) Bracing shall be of round hardwood poles securely placed, Bracing. lashed to standards by rope and the lashings shall be kept wedged up.

Division 5—Scaffolds for Carpenters, Painters, Plumbers Others working on Wooden Buildings to a height of 25ft.

24. Notwithstanding any other of these regulations, scaffolds Materials. for carpenters, painters, plumbers and others working on wooden buildings to a height not exceeding 25 ft. may be of timber and—

- (a) standards shall be of not less than 3 in. x 2 in. hardwood or 4 in. x 2 in. pine;
- (b) putlogs shall be of not less than 6 in. x 1 in. pine;
- (c) braces shall be of not less than 3 in. x $1\frac{1}{2}$ in. pine or other approved timber;
- (d) guard rails shall be of not less than 3 in. x $1\frac{1}{2}$ in. pine.
- 25. (1) Except that ledgers may be omitted and the studs Assembly. of the building shall constitute the inner verticals (or uprights), a scaffold erected pursuant to this Division shall comply, as to its general arrangement, with subregulation (1) of regulation 11 and, as to its assembly, with this regulation.

- (2) Standards shall be spaced not more than 9 ft. apart and standards. shall be erected so as to have one face in the same plane as a face of a stud.
- (3) Putlogs shall be well nailed, at one end, to a standard and Putlogs. at the other end, to the face of a stud that is in the same plane as the face of the standard to which the former end is nailed.
- (4) Platform planks shall be such as comply with regulation 50 Platform except that they may be laid so as to form a working platform planks. of not less than 18 in., in width.

Guard rails.

(5) A guard rail shall be such as complies with regulation 52 and shall be securely fastened to the standards, at a height not less than 2 ft. 6 in. above each working platform.

Braces.

- (6) Braces shall be well nailed to the standards.
- (7) Notwithstanding the preceding provisions of this regulation, an Inspector may direct that a scaffold to be erected pursuant to this Division be erected in such other manner as, in his opinion, is necessary to make it safe for use.

Division 6-Light Swinging Stages.

Construction generally.

- 26. Every swinging stage used, or intended to be used, as a scaffold shall-
 - (a) be so constructed as to bear three times the maximum weight that may at any time be supported by it;
 - (b) be of a design approved by the Chief Inspector; and
 - (c) not be used, unless examined by an Inspector, immediately prior to each occasion of its erection for use.

Details of 27. (1) The construction and assembly of a swinging stage construction used, or intended to be used, as a scaffold shall comply with the provisions of this regulation.

Blocks.

(2) Blocks shall be of iron, with not less than 4 in., in diameter of sheave, and shall comprise a double and a single block, each with a swivel eye.

Falls.

(3) Falls shall be of manilla or sisal cordage rope, having a circumference of not less than 2½ in. or of such other rope as the Chief Inspector may approve; but, where the presence of acid or fumes is likely to affect the falls, they shall, unless an Inspector otherwise directs, be of 5/16 in. flexible steel wire.

Hangers.

(4) There shall be two wrought iron or mild steel hangers, having a cross-sectional area of $\frac{3}{4}$ sq. in., of a design approved by the Chief Inspector and fitted to the satisfaction of an Inspector.

Stages.

(5) Where the stage exceeds 18 ft. in length and the distance between the hangers exceeds 12 ft. the planking of the stage shall be stiffened with an approved truss beneath it; and the other parts of the stage shall be of such construction as may be directed by an Inspector.

Guard rails.

(6) Guard rails, of not less than $\frac{3}{4}$ in. nominal bore galvanised wrought iron pipe, shall be securely fixed, not less than 2 ft. 6 in., or more than 3 ft. above the floor, to both sides and both ends of the stage.

Fender boards.

(7) Fender boards of not less than 4 in. x 1 in. shall be fitted to both sides and to both ends of the stage.

Needle supports.

- (8) Overhead needle supports, if constructed of-
 - (a) timber, shall, where not projecting for any distance exceeding 4 ft., be of not less than 6 in. x 4 in. oregon pine or other approved timber, on edge, otherwise they shall be of a heavier timber, to the satisfaction of an Inspector:
 - (b) steel, shall be constructed, placed and used in accordance with the directions of the Chief Inspector; and
 - (c) metal scaffold tube, shall be used with the approval of an Inspector and not otherwise and, then, shall not project for any distance exceeding 13 in. where a single tube is used, or exceeding 26 in. where the tubes are doubled.

28. Outriggers shall not be fitted to a swinging stage without the approval of an Inspector.

Outriggers to be approved.

A winch or similar device, including the wire and attachments, shall not be used in conjunction with a swinging stage, unless the winch or device, and the attachments, are of a type approved by the Chief Inspector.

Winches to be approved.

30. A person under the age of eighteen years shall not work on, use, erect or operate a light swinging stage and at all times apprentices or junior workers over the age of eighteen years shall be accompanied by a qualified adult worker whilst working on the stage.

Age restrictions.

Division 7-Boatswains Chairs.

(1) Every boatswains chair shall be constructed and assembled in conformity with this regulation and shall not be used unless examined by an Inspector immediately prior to use.

Construction and assembly.

(2) The seat of a boatswains chair shall—

Seats.

- (a) be constructed of timber of not less than $1\frac{1}{4}$ in. thickness, and 9 in. in width;
- (b) be so arranged that a person seated in it has a seating space of not less than 18 in., nor more than 22 in., between the slings; and
- (c) have cleats made of timber of not less than 3 in. x 1 in. sectional dimensions firmly fixed to the under side so as to bear the weight of the sling and prevent splitting of the seat.
- (3) The sling supporting the seat of a boatswains chair shall— Slings.

- (a) be of flexible steel wire rope of not less than 5/16ths in., in diameter;
- (b) be crossed under the chair seat and each leg shall pass through the seat and be arranged to form a loop, fitted with a suitable thimble, over the seat, not more than 2 ft. 9 in. above it, to take a mild steel shackle, of not less than $\frac{2}{3}$ in., in diameter, for attachment to the swivel eye of the block;
- (c) be suitably spliced or joined by two bull-dog grips, on the under side of the seat; and
- (d) be fixed to the under side of the seat to prevent it ${\tt Blocks.}$ from tilting in the sling.
- (4) The rope blocks included in the tackle for suspending, raising or lowering a boatswains chair shall comprise at least a two-sheave upper, and a single-sheave lower, block of which, in each case
 - (a) the carcase shall be of steel;
 - (b) the sheaves shall be not less than 4 in., in diameter and be grooved to accommodate the rope; and
- (c) the head fitting shall be of a swivel closed eye type; and the rope anchor or becket, on the bottom block, shall not, unless otherwise approved, be welded to the block.
- (5) The rope of the tackle suspending a boatswains chair shall Rope. be either manilla or sisal fibre, of not less than 2 in. in circum-ference; and shall be so reeved as to form a four-part rope tackle.

Supports.

(6) All overhead supports for a boatswains chair shall be safely secured in position and shall be of sufficient strength to sustain a load of not less than four times the maximum weight intended to be suspended from them.

Age restrictions.

32. A person under the age of eighteen years shall not work on, use, erect or operate a boatswains chair; and at all times apprentices and junior workers over the age of eighteen years must be supervised by a qualified adult worker.

Division 8.—Suspended Scaffolds.

Interpreta-

33. In this regulation "suspended scaffold" means a working platform suspended from overhead supports or outriggers of "I" section steel, raised or lowered by means of winches provided with double acting pawls and ratchets or similar self-sustaining gear.

Construc-

34. (1) Suspended scaffolding shall be of a kind generally approved by the Chief Inspector and shall not be erected or used until examined and approved by an Inspector.

Machines.

- (2) A scaffolding machine, winch or like mechanism shall-
 - (a) not be used, as a lifting or lowering mechanism of a suspended scaffold, unless drawings, or a specimen, of the machine, winch or mechanism, together with a complete description in writing, of the manner in which it is to be set up, used and maintained, have previously been submitted to and approved by the Chief Inspector;
 - (b) be designed, set up, used and maintained as provided by these regulations and in accordance with the approved design and description;
 - (c) be bolted to the steel frames upon which the scaffold boards rest; and
 - (d) while in use, be kept lubricated and maintained in an efficient state of repair, free from accumulation of dust, dirt or foreign matter.

Ropes.

(3) Ropes for suspended scaffolding shall be of approved flexibility, have an ultimate breaking strength of not less than six times the maximum load to be imposed and be effectively secured to anchorages of an ultimate strength at least equal to that of the rope.

Structural members.

(4) The steel structural members of a suspended scaffolding platform shall be so designed, constructed and used that, under maximum conditions of loading, the stress in each part of those members and in the connections of one member, or a part of a member, to another, shall not exceed the ultimate unit strength of material used divided by the constant, 4.

Cantilever supports.

- (5) The cantilevers constituting the overhead supports for a suspended scaffold shall— $\,$
 - (a) be of rolled steel joist sections at least equivalent in strength and stiffness to a 7 in. x 3½ in. x 15 lbs., Australian Standard Rolled Steel Joist Section in accordance with A.S.B. 107 as defined in Australian Standards for Structural Steel (excluding plate) and Australian Standard Rolled Steel Sections for Structural Purposes, A.S. No. A1-1956;
 - (b) not project more than 6 ft. 6 in. from the outside point of support on the building or structure;
 - (c) be spaced no more than 8 ft. apart, measured from the longitudinal centre line of one, to that centre line of the adjacent cantilever; and

- (d) be provided with an adequate and firm support, so arranged that the projecting or cantilever portion is as short as possible.
- (6) The inner end of each cantilever shall-

Fixing of cantilevers.

- (a) be secured to the building or structure with bolts or other suitable fittings, in such manner that the bolts or fittings, as well as the portions of the building or structure to which the cantilever is fixed, provide a factor of safety of at least 4, under maximum conditions of loading;
- (b) where necessary, be provided with counter-balancing, in accordance with the requirements of an Inspector;
- (c) be so shored from a higher floor or steel frame of a building or structure, that every shore used-
 - (i) is positively secured in its correct position and in such a manner that no lateral movement can occur;
 - (ii) is of adequate strength for the purpose; and
 - (iii) is so placed and fixed that undue load is not imposed on any part of the building or struc-ture supporting the cantilever.
- (7) Every platform or structure and every beam, bearer or Construction other structural member, used for supporting any cantilever and of structures. the loads therefrom or from any counterbalance or used for supporting and transferring the loads from a cantilever to portion of a building or structure, shall-

of platforms or structures.

- (a) be of such construction that a factor of safety of at least 6 obtains in all timber parts, taking into consideration the resultant loads from the cantilever, both when the suspended scaffold is fully loaded and when it is unloaded; and
- (b) be so constructed, fixed and secured that lateral movement cannot occur in any direction.
- (8) Every bolt used-

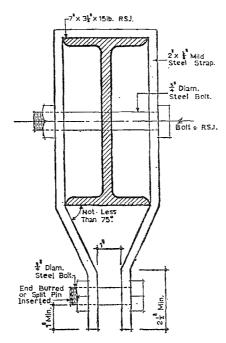
Bolts.

- (a) for anchoring a cantilever;
- (b) in connections in the structure supporting a cantilever;
- (c) for securing a shore in position; or
- (d) for securing bracing or other structural members, shall be not less than 5/8 in., in diameter and shall be provided with standard washers.
- (9) For the purpose of anchoring the scaffolding suspension Rope anchors. ropes or rope blocks to the cantilevers-

- (a) A fitting of mild steel stock, having sectional dimensions of not less than 2 in. x § in., shall be formed and be fitted around, and be bolted to, the outer end of each cantilever projection, as shown in the diagram hereunder; and
- (b) a fitting of the same kind and dimensions as that shown in the diagram shall be fitted around the inner portion of each cantilever projection, without, however, being bolted to the web of the cantilever unless an Inspector otherwise directs;

and in each case, the dimensions and other specifications of the fittings and the bolts used therewith shall, unless an Inspector otherwise directs, conform with those depicted in the diagram.

The Diagram.



SUSPENDED SCAFFOLDING. ROPE ANCHORS.

Platforms.

- (10) Every platform unit shall comprise four machines such as are mentioned in, and are approved under, subregulation (2) of this regulation and shall—
 - (a) have an overall width not exceeding 5 ft.;
 - (b) be formed of platform planks, of not less than 9 in. x 2 in. oregon pine or 9 in. x $1\frac{1}{2}$ in. karri, finished size, so laid that—
 - (i) their edges abut and fit tightly together; and
 - (ii) each plank overlaps its support by not less than 12 in. or more than 24 in.;
 - (c) have the ends of the platform joined together with cleats of 4 in. x $1\frac{1}{2}$ in. timber or of 2 in. x $\frac{3}{3}$ in. mild steel, bolted with bolts of not less than $\frac{3}{3}$ in., in diameter, at or near the end of the planks and outside the bearers, and so arranged as to ensure that the ends of the planks cannot lose their bearing on the surface of the support;
 - (d) be supported on bearers of steel or other approved metal, having a transverse strength at least equivalent to a 2 in. x 2 in. x 3 in. Australian Standard steel angle section; and
 - (e) be provided with-
 - (i) guard rails, fixed in conformity with regulation 52; and
 - (ii) fender boards, fixed in conformity with regulation 51.

35. The load on the platform over any one bay of a suspended Maximum scaffold, constructed in accordance with this Division, due to the weight of men and materials, shall not exceed 1,200 lb. the gross weight, that is, the weight of scaffolding platforms, machines, ropes, men and materials on any one outrigger, shall not exceed 1,800 lb. or such load as approved.

loading of suspended

Division 9—Gantries.

36. (1) A person shall not erect any gantry, including a tripod gantry, until he has submitted plans and specifications of the gantry to the Chief Inspector and those plans and specifications approved. have been finally approved.

of gantries to be

(2) The Chief Inspector may require any modification of the plans and specifications submitted pursuant to this regulation that he thinks fit, before finally approving of them.

Division 10-Stages for Engineers and Boilermakers.

37. Every stage used, or intended to be used, by engineers or Construction boilermakers shall be constructed in accordance with this Division. generally

38. (1) Where the stage is a hanging stage, it shall be constructed in accordance with this regulation and shall be of such strength as to be capable of bearing at least three times the weight that it will be called upon to support.

construction.

(2) The stage shall be suspended from overhead catheads or Suspension. needles, properly lashed in position or otherwise securely fixed.

Planks.

- (3) The planks forming the stage shall-
 - (a) be of not less than 12 in x 3 in. Oregon pine, free from knots or shakes; and
- (b) if lapped, be lapped for a distance of at least 4 ft.; and a stage shall not be formed by a single plank, except where the nature of the work is such as to require the workman to sit to it.
- (4) Bearers for stages of two or more planks in width shall Bearers. be of not less than 6 in. x 6 in. Oregon pine.
- (5) The stage shall be suspended by steel ropes of not less Ropes. than $1\frac{3}{4}$ in., in circumference, spaced at a distance of not more than 14 ft., and carried around the cat-heads or needles and around the bearers.
- (6) Where the use of lifelines would not interfere with working Lifelines. operations, and the workmen have to stand upon a stage, lifelines of cordage rope of not less than 2½ in., in circumference shall be provided, properly lashed to the supporting ropes by means of $1\frac{1}{2}$ in. cordage rope lanyards.

- (7) Guys of sufficient strength and number to secure the proper Guys. steadiness of the stage shall be provided, in each case.
- 39. (1) Where a stage constructed for the purposes of this Supported Division is to be supported by trestles, every trestle shall be of stages. sufficient strength for that purpose and shall be properly framed with legs extending in more that two directions.

(2) Every trestle and every stage supported by trestles, shall be constructed or laid to the satisfaction of an Inspector.

Division 11-Scaffolds on Steel Tanks.

40. (1) Every scaffold for boilermakers, welders and others construction working on steel tanks shall be constructed in accordance with generally. this Division.

Scaffolding platforms.

- (2) The scaffolding platform shall-
 - (a) comprise platform planks of not less than 9 in. x 2 in. Oregon pine, or 9 in. x 1½ in. karri, 12 ft. in length, lapped under and over the ends; and
 - (b) be not less than two planks in width.

Platform supports.

- (3) The scaffolding platform shall be supported by brackets of mild steel angle or tube construction, provided with—
 - (a) hooks, formed of 2 in. x \(\frac{1}{4}\) in. mild steel, for attachment to the tank, spaced not more than 8 ft. apart, centre to centre: and
 - (b) a socket on the outer end, for a guide rail extension.

Lugs.

- (4) Lugs or saddle pieces of mild steel, to receive the hooks of the scaffolding platform bracket shall be welded to the tank, to the satisfaction of an Inspector; and a person engaged in welding those lugs or saddle pieces—
 - (a) shall not depart from the site of that work, for any purpose, whatever, leaving a lug or saddle piece partially and incompletely welded; and
 - (b) shall indorse his initials, with a durable crayon, on the tank, immediately adjacent to every lug or saddle piece that has been finally and completely welded.

Guard rails.

(5) A guard rail or lifeline shall be fixed to all working platforms not less than 30 in., nor more than 36 in., above the platform planks and, unless fender boards are fitted to the platform, a second, intermediate guard rail or lifeline shall be fitted or run, at a height, half the distance between the platform planks and the upper rail or line; and where lifelines are used, they shall be of non-inflammable material and not be allowed to sag.

PART IV-GEAR.

Division 1—Single-Mast Derricks.

Erection and use.

41. All single-mast derricks (also called "derrick poles" and "gin poles"), sheer legs and similar structures shall be erected and used in a safe manner, to the satisfaction of an Inspector.

Division 2.—Hoists for Building Operations.

Interpreta-

- 42. In this Division—
 - "tower hoist" means a hoisting appliance, driven or worked by the aid of any power, other than hand power, by which goods or materials can be raised or lowered and of which direction of movement is restricted by a guide or guides, and includes the supporting structure, winch or winches, equipment and gear connected with the hoist:
 - "skip hoist" means a hoisting appliance, other than a tower hoist, driven or worked by the aid of any power, other than hand power, for the sole purpose of raising or lowering concrete or similar material, in an automatic tipping bucket, and of which the direction of movement is restricted by a guide or guides, and includes the supporting structure, winch or winches, equipment and gear connected with the hoist;
 - "friction winch" means a winch fitted with a single lever, for controlling, hoisting and braking and driven by a prime mover, at constant speed, to operate the hoisting motion through a friction drive, the load being lowered by the effect of gravity.

(1) A tower hoist or skip hoist shall not be used, until Restrictions it has been inspected and approved for use by an Inspector; and, hoists. except in the case of an approved, fabricated, mobile unit not exceeding 30 ft., whenever any such hoist is dismantled and re-erected it shall not be used until again inspected and approved.

- (2) Subject to subregulation (5) of this regulation, a person shall not ride on a tower hoist, unless he is a foreman or other person in direct control of loading or unloading materials, onto or from the hoist, or is a person authorised by the owner to carry out maintenance on the hoist, and not even any of those persons
 - (a) he is alone and unaccompanied by materials;
 - (b) the cage is panelled on three sides, to a height of 6 ft., and is equipped with efficient safety gear to the satisfaction of the Chief Inspector;
 - (c) a gate is provided or, a bar, hinged to one side of the cage and hooked at the other, is fitted, across the open side, between 3 ft. 6 in. and 4 ft. from the floor and 15 in. back from the edge of the cage;
 - (d) the rope by which the cage is suspended is shackled to the cage or, where the rope is hooked to the cage, the hook is a safety hook of type satisfactory to the Inspector; and
 - (e) the hoist machinery is equipped with-
 - (i) a solenoid brake that automatically engages when the control handle is in the neutral position;
 - (ii) a "dead man" controller; and
 - (iii) a manually operated brake, fitted to the machine drum.
 - (3) A person shall not ride on a skip hoist.
- (4) A prominent notice prohibiting persons from riding on a tower hoist or skip hoist shall be fixed to the platform of, and at every gate or entrance to, the tower hoist or skip hoist, as the
- (5) Notwithstanding any other provision of this regulation, the Chief Inspector may, subject to compliance with his requirements, approve of a tower hoist being used for the conveyance of men and materials, generally.
- 44. (1) Every tower hoist and skip hoist and every part of construction every such hoist, including all working gear, anchorages and supports, shall be of good mechanical construction, in conformity with this Division, and of sound material, adequate strength and free from apparent defect and be properly maintained.

- (2) The tower of every tower hoist and every skip hoist shall— Towers.
 - (a) be effectively braced, guyed or otherwise securely supported, so as to form a rigid and stable structure;
 - (b) be securely enclosed with 2 in. 12 gauge wire mesh or steel fabric or other material approved by the Chief Inspector, from the ground to not less than 6 ft. above the uppermost landing, so as to prevent persons falling or being struck by the moving platform or bucket or by falling materials.
- (3) Except with the approval of the Chief Inspector the Platforms. platform area of a tower hoist shall not exceed 36 sq. ft.
- (4) A substantial gate, so constructed as to safeguard persons from falling into the lower shaft or from being struck by the platform in motion or by falling materials, shall be provided at

every level at which the platform is capable of being loaded or unloaded; and every gate—

- (a) other than a rising gate, shall be not less than 5 ft., in height; and
- (b) being a rising gate, shall—
 - (i) be not less than 4 ft. 6 in., in height;
 - (ii) have the stiles so extended that any opening below the bottom rail does not exceed 18 in., when the gate is closed; and
 - (iii) when fully opened, afford an opening of not less than 6 ft., between the working level and the bottom rail of the gate.

Protection from skip hoists. (5) Nothing in subregulation (4) of this regulation shall be read as requiring skip hoists to be fitted with gates at a discharging point, if a fixed enclosure that will effectually safeguard persons from falling into the tower shaft or from being struck by the bucket in motion or by falling materials, is fitted at the discharging point.

Signalling systems.

- (6) Every tower hoist and skip hoist shall be provided with an efficient, independent signalling system, that—
 - (a) will enable the transmission of signals to the hoist operator, requiring him to raise, lower or stop the hoist or bucket, as the case may require;
 - (b) will, where the height of the uppermost landing exceeds 30 ft., indicate to the operator by a lighted signal, whether or not the gates are in a closed position; and
 - (c) comprises an electrical circuit not exceeding 32 volts, with all equipment and wiring adequately protected from accidental interference.

Distance of

(7) Every tower hoist and skip hoist shall be so constructed that the distance through which the platform or bucket can travel, beyond the highest loading or unloading level, before any part of the platform or any bucket or device attached thereto meets an obstruction, shall be not less than 6 ft.

Winches.

- (8) The winch operating a hoist-
 - (a) shall, where driven through a clutch, have the driving mechanism and brake operated by independent control levers; and the brake shall operate on the drum motion and be capable of being locked in the "full-on" position;
 - (b) may, where driven by an electric winch that is permanently coupled to the motor, have a brake of the magnetic type, operated through the electrical circuit of the motor control; and
 - (c) shall not, except in the case of a skip hoist, be a friction winch.

Guards.

(9) All dangerous parts of the machinery used upon, or in connection with, a tower hoist or a skip hoist (including the hoist rope) shall be effectively guarded, at all times when the hoist is in motion or in use.

Sheaves and pulleys.

(10) The minimum diameter at the bottom of the groove of any hoist, rope sheave or pulley shall not be less than twenty times the diameter of the rope used on it, for speeds not exceeding 120 ft. per minute, and for speeds in excess of 120 ft. per minute, the diameter of the sheave or pulley shall be increased by an amount equal to twice the diameter of the rope.

Sheave spindles.

(11) Hoist rope sheave spindles shall be fitted with standard plummer block bearings and those bearings shall be fitted with lubricating devices, so that they will receive the necessary lubrication.

(12) Safe and convenient access shall be provided to the head Access. sheaves of every tower hoist and skip hoist.

(1) Every tower hoist and skip hoist shall, before being put into service, for the first time, be tested with a load that is 25 per cent. in excess of the safe working load; and when a hoist so tested is subsequently re-erected on a new site, it shall be tested with a load that is 10 per cent, in excess of the safe working load.

ing loads.

- (2) A prominent sign indicating the safe working load shall be painted on every tower hoist and skip hoist, in a position where it may clearly be seen by the operator of the hoist and by every person loading it.
- (3) A person shall not use, operate or control any skip hoist or tower hoist that is loaded in excess of the load indicated on the sign painted upon it, in accordance with subregulation (2) of this regulation.

Division 3—Special Types of Hoists.

Restrictions

- A cantilevered platform type of hoist shall not be used, unless it has previously been approved by the Chief Inspector, in writing; and unless specially exempted by the Chief Inspector the
 - (a) has, when set up for use, the landing and loading areas effectively guarded, to prevent persons entering those
 - (b) has guard rails fitted at all landings; and
 - (c) where the uppermost landing exceeds 30 ft., in height, comprises the signalling devices prescribed by subregulation (6) of regulation 44.

Division 4.—Whip or Sheerleg Hoists.

Interpreta-tion.

- (1) In this Division, "whip hoist" means a simple sheer legs or other approved frame, set up at the edge of an elevated platform or surface, or at the brink of a hole, and carrying a rope and sheave equipment by means of which loads (commonly consisting of barrows of building material) are raised or lowered, the load being, to some extent, steadied and guided, during ascent and descent, by sliding or dragging it against skidboards or some similar installation.
- (2) Without limiting the generality of subregulation (1) of this regulation, a whip hoist is gear so erected and guyed as to enable the top end of the sheer legs to move inward and outward, laterally through a sufficient arc to enable the load to clear, and to be drawn inward over, the base plank, as occasion requires.
- 48. (1) The construction and assembly of a whip hoist shall, Construction unless an Inspector otherwise directs, be in conformity with this regulation.

- (2) The sheer legs shall be symmetrical in construction and Sheer legs. shall-
 - (a) if of timber, comprise legs of a section each not less than 5 in. x 3 in. and of sufficient length to extend 12 in. beyond the top connecting bolt;
 - be bolted together by a connecting bolt, having a diameter of not less than \(\frac{3}{4} \) in, and having the nut locked;
 - (c) be constructed and set up in such manner that-
 - (i) the horizontal distance between the lower ends of the legs is not greater than 7 ft. 6 in.; and
 - (ii) the top connecting bolt is not less than 14 ft. above the horizontal at which the distance between the legs is measured;

alternatively, and where a large sheer legs is required, the angle contained by each leg and the horizontal on which it bears shall be not less than 75 degrees;

- (d) have both legs resting upon a base plank of not less than 10 in., in width and 2 in., in thickness;
- (e) be prevented from spreading and from moving towards the edges of the base plank, by the provision of 3 in. x 2 in. hardwood battens about each leg, secured to the base plank by bolts of not less than ½ in., in diameter:
- (f) have the legs lashed to the base plank, by wire rope passing through holes drilled in the legs, not less than 6 in. from their lower ends, so as to prevent them lifting over the battens; and
- (g) if not constructed of timber, be of such material, and be so assembled as an Inspector may approve.

Hoisting

(3) The uppermost hoisting block shall be suspended by a steel wire rope of not less than $1\frac{1}{2}$ in., in circumference, resting in the upper angle formed between the legs, above the connecting bolt.

Back guvs.

(4) A back guy of steel wire rope of at least $1\frac{3}{8}$ in. in circumference shall be secured to the sheer legs at the point of their intersection, by at least two full turns and two approved wire-rope grips, or by two full turns and a spliced eye.

Front or lazy guys.

(5) A front, or lazy, guy rope, being either the same as that used for a back guy or of an approved fibre of not less than $2\frac{1}{2}$ in., in circumference, shall be secured to the sheer legs in the same manner as the back guy.

Movement of sheer legs.

(6) The back guy shall be so adjusted as to cause the load to be steaded and guided, by sliding, or dragging, against the skids; and the lazy guy shall be so adjusted as to restrict the inward travel of the sheer legs to 30 in. at the top connecting bolt.

Skids.

(7) Smooth skids having a horizontal width of not less than 45 in. shall be provided and securely fixed in such a manner that they guide the barrow or other lifting medium and its load smoothly from level to level.

Landing platform

- (8) The sheer legs shall be erected on an extended landing platform, securely tied into the building or adequately braced; and the platform shall—
 - (a) be not less than 9 ft. in width (including the width of the normal scaffold) by 14 ft. in length; and
 - (b) be provided, at all sides, with guard rails, conforming with regulation 52, fixed not less than 2 ft. 6 in., or more than 3 ft., above the floor of the platform.

Hauling rope.

(9) The hauling rope shall lead, or pass, from the top block in a direction as nearly parallel as possible to a leg of the sheer legs, and thence through a guide or deflector block, secured to the foot of that leg or to a point closely adjacent thereto, before passing to the winch.

Guard rails.

(10) Guard rails shall be provided and so fixed that persons not actively engaged in the hoisting operations are restrained from entering within 15 ft. of the skids and a person unless so engaged shall not enter within that distance or within the guard rails.

Loading in certain cases.

49. The loading on a whip hoist shall, where comprising legs of metal scaffold tube mentioned in regulation 8, not exceed 950 lbs. and, where comprising legs of 2 in. galvanised wrought iron pipe, not exceed 2,500 lbs.

Division 5-Miscellaneous Gear.

Platform planks.

- 50. (1) Subject to subregulation (2) of this regulation, platform planks shall— $\,$
 - (a) if of Oregon timber, be not less than 9 in., in width nor less than $1\frac{1}{2}$ in., in thickness or, if of karri timber, be not less than 9 in. in width and $1\frac{1}{4}$ in., in thickness, both finished sizes;

- (b) be of sound timber, supported at each end by a putlog and project not more than 9 in. and not less than 6 in. beyond the putlog;
- (c) where lapped, be lapped not less than 9 in.;
- (d) be closely laid over the full width of the frame; and
- (e) not be painted.
- (2) Where a single plank is used for one man only, for painting and like work, it shall conform to the table to this subregulation.

The Table.

Type	Height.	Span.	Size of Plank.
Oregon	 Up to 10 ft.	Up to 12 ft.	9 in. x 1½ in.
Oregon	 Up to 10 ft.	12 ft14 ft.	9 in. x 2 in.
Oregon	 Over 10 ft.	Up to 12 ft.	12 in. x $1\frac{1}{2}$ in.
Oregon	 Over 10 ft.	12 ft14 ft.	12 in. x 2 in.

- (1) Fenders such as will effectually prevent materials, tools Fender or other objects falling from a platform shall be securely fixed to the verticals, at the edges and ends of all scaffolding platforms exceeding 12 ft. in height; and shall, in each case—
 - (a) extend to a height of not less than 9 in., above the surface of the platforms; and
 - (b) be not less than 1\frac{1}{4} in., in thickness.
- (2) In any case where greater measure of safety is required, an Inspector may direct that fender boards shall be used and be of an increased height.
- 52. (1) Guard rails, consisting of tube or timber, of sufficient rigidity to provide maximum safety, shall be fixed at a height of not less than 2 ft. 6 in. or more than 3 ft., above the surface, at the edges and ends, of all working platforms exceeding 12 ft., in height.

- (2) Notwithstanding the provisions of subregulation (1) of this regulation, other types of guard rails may be used, where approved by an Inspector.
- 53. (1) All portable timber ladders shall be properly con-Ladders. structed of clean Oregon pine or other approved timber and shall comply in respects with Australian Standards—Portable Timber Ladders (No. A.90—1959.—C.A. 29, 1959).
- (2) In the case of extension ladders, the dimensions of the stiles shall be as set out in the table to this regulation.

THE TABLE.

Closed	Length (Feet	t). Extended	Minimum Overlap (feet)	Dimensions of Stiles. (inches)
7	up to and	12	2	$2\frac{1}{4} \times 1\frac{1}{4}$
12	including	22	2	$2\frac{1}{4} \times 1\frac{1}{4}$
13	up to and	24	2	$2\frac{1}{2} \times 1\frac{3}{8}$
16	including	30	2	$2\frac{1}{2} \times 1\frac{3}{8}$
18	up to and	32	4	$2\frac{3}{4}$ x $1\frac{3}{4}$
22	including	40	4	$2\frac{3}{4} \times 1\frac{3}{4}$
24	up to and	42	6	$3\frac{1}{4} \times 1\frac{3}{4}$
28	including	50	6	$3\frac{1}{4} \times 1\frac{3}{4}$

- (3) Single ladders for general building work shall, in the case of batten ladders—
 - (a) not exceed 35 ft., in length;
 - (b) if not exceeding 16 ft., in length, have stiles of $2\frac{7}{8}$ in. x $1\frac{3}{8}$ in., finished size;
 - (c) if exceeding 16 ft., and not exceeding 20 ft., in length, have stiles of $2\frac{3}{4}$ in. x $1\frac{3}{4}$ in., finished size.
 - (d) if exceeding 20 ft., in length, have stiles of $3\frac{3}{4}$ in. x $1\frac{3}{4}$ in., finished size; and
 - (e) have battens of $2\frac{1}{4}$ in. x 1 in., partly sunk into, and firmly nailed or screwed to, the stiles.
- (4) Where steel or metal ladders are used, they shall be constructed and used to the satisfaction of an Inspector.

Throw of control lever of friction holst winches.

54. The maximum throw of the control lever of a friction hoist winch shall not exceed $60\ degrees.$

Safe-working load of flexible steel wire rope.

- 55. (1) The safeworking load of flexible steel wire rope used as gear is, for the purpose of permanent standing guys $\frac{1}{4}$, and for any other purpose $\frac{1}{6}$, of the guaranteed breaking strength load.
- (2) A load in excess of the safeworking load shall not be applied to any rope used as gear.

Fitting of guards to eliminate danger.

56. Any mechanical gear that is, by its nature, dangerous shall be fitted with such guards as will effectively eliminate the danger to any person near it, when in operation.

PART V—GENERAL PROVISIONS AS TO SCAFFOLDING AND GEAR.

Division 1-Miscellaneous.

Protection of Public.

- 57. (1) Where a scaffold is erected or is being erected in, or in the vicinity of, a public thoroughfare or a public place, effect shall be given to the requirements of this regulation, for the safety of the public.
- (2) The first stage of the scaffold shall be boarded over, to the full width of the foot-way, or, if the scaffold does not extend over the foot-way, a fan of not less than 6 ft. in width and projecting at an angle of 45 degrees to the vertical shall be provided, at the first stage, extending along the outside, and returned at both ends of the scaffolding; and both the boarding and the fan shall be placed in position before any further erection or work is commenced.
- (3) Where access through boarding is made for haulage of material, the opening shall be railed off, to prevent the public passing under the scaffold, at that point.
- (4) Power and overhead wires shall be protected before other work is commenced.
- (5) Night lights shall be provided at both ends at the scaffold, at access ways through the scaffold and elsewhere, as directed; and any materials deposited in a street shall be adequately lit.
- (6) Corner standards of the scaffold shall be painted white and all sharp and protruding members shall be protected by wrappings of hessian or like material.
- (7) Where the type of work being performed so requires, a fender board and a canvas or hessian screen shall be provided, on the working platform, to the outside and the ends of the scaffold.

- (8) Nothing in this regulation precludes an Inspector from directing such other measures as he thinks necessary to ensure the safety of the public in the vicinity of the works.
- 58. Notwithstanding anything to the contrary in these regulations, an Inspector may direct the construction of any scaffold to be made, any gear to be used, and any formwork to be erected, in such manner as he thinks necessary to make the scaffold and gear and formwork safe for use.

Inspectors' powers to ensure safety.

(1) Where any building is in the course of erection, repair, or structural alteration, it is the duty of the owner to make proper provision for the protection of workmen and others within, or in the vicinity of the building, by-

- (a) boarding over all well-holes, staircases or lifts;
- (b) fixing guard rails down all the stairs and across all landings and well holes;
- (c) adequately lighting all access ways; or
- (d) adopting such other means for that purpose, as may be directed by an Inspector;

and the owner shall maintain the boarding, guard rails and lighting in position, so long as any risk of an accident would be occasioned by their removal or the removal of any of them.

- (2) All runs, gangways or similar means of communication between different portions of a scaffold or building shall be at least 18 in. wide and, where composed of two or more boards, the boards shall, if necessary, be bolted together, in such a manner as will prevent unequal sagging.
- (3) The owner shall cause all floors, landings, runs, gangways, platforms, scaffolds or places where scaffolding is to be erected to be cleared, and at all times, to be kept clear, of rubbish and any material not required for immediate use.
- (4) A person shall not remove any brace, plank, putlog or standard from any scaffold, without the authority of the person in charge.
- (5) Footplanks not exceeding 12 in., in height may be used, if approved by an Inspector.
- (6) Where barrows are to be wheeled on any scaffold sufficiently heavier timbers shall be used, or the putlogs shall be spaced not more than 4 ft. apart, or as an Inspector may direct.
- (7) Proper framed slipheads or trestles may be used, in lieu of standards, where the height of the scaffold does not exceed 8 ft.
- (8) Wooden brackets shall not be used for, or in connection with, any scaffolding or gear.
- (1) A lifting appliance shall not be mounted on any Lifting scaffold, unless the scaffolding members are of adequate strength to withstand the maximum additional forces that could arise, during the use of the appliance.

appliances mounted on scaffolds.

- (2) Where the safeworking load of the lifting appliance to be mounted on a scaffold exceeds 5 cwt., such evidence shall be submitted to the Chief Inspector by the owner as will establish that the scaffolding members are of a strength adequate to comply with subregulation (1) of this regulation.
- 61. (1) Lift boxes, designed to carry up to three tons, shall Lift boxes. be constructed of 2 in. timber properly framed together and each box shall have two carrying straps, formed of 3 in. x $\frac{5}{8}$ in. iron, passing under the bottom of the box and up each of two sides and secured to the timber with $\frac{5}{8}$ in. bolts.

- (2) Eyelet-holes shall be formed on the top ends of the carrying straps to receive box chains.
- (3) Where a lift box is used for the carriage of bricks, rubble or other loose material, it shall be enclosed on four sides.

Pallets.

62. Pallets used for lifting building materials shall be of a design approved by the Chief Inspector; and, when materials are being lifted in pallets, such safeguards as may be necessary to prevent spillage shall be provided.

Access for vehicles.

63. Where an entrance for vehicles between standards is necessary, the spacing of the standards between which the entrance is to be provided may be increased to a distance not exceeding 12 ft. and those standards shall, thereupon, be so braced as to maintain full stability of the scaffold.

Protection of

64. Where the normal use of vehicles in the vicinity of a scaffold creates, or could create, a danger of injury to the scaffolding, adequate protection of the scaffolding shall be provided by way of a suitable barricade or effective bracing.

Brick blocking and drums.

- 65. (1) Under no circumstances shall brick blocking be used for any part of a scaffold at a height greater than 2 ft. from the ground or from an internal boarded floor.
- (2) Except as an Inspector may otherwise approve, not more than one drum shall be used, and then on end only, for the purpose of forming part of a scaffold from the ground or an internal boarded floor.

Working platforms.

- 66. (1) Working platforms for trades using mortar boards or the like shall be not less than 3 ft., in width and all other working platforms shall be at least 1 ft. 6 in., in width.
- (2) Where any scaffold is used in connection with ceiling work, the opening between platform boards shall be not greater than 9 in. and shall be so secured in position as to prevent spreading.
- (3) Where scaffolding is erected from open floor joists or girders, the joists or girders shall be kept close covered, for a distance of at least 5 ft. from the access edge of the scaffold.

Supports for asbestos cement sheathing. 67. Where asbestos cement wall sheathing is to be fastened on a building, the sheathing shall be held suspended in position for fastening, by apparatus of a type approved by the Chief Inspector.

Division 2.—Scaffolding Adjacent to Electric Wires.

Scaffolding adjacent to electric wires.

- 68. (1) Every owner intending to erect scaffolding adjacent to, under, or over, any electric wires shall give notice of the presence of the electric wires to an Inspector, at least twenty-four hours before the commencement of the work; and the Inspector shall thereupon notify the electric supply or other authority of that intention
- (2) Upon receipt of a notice from an Inspector, pursuant to subregulation (1) of this regulation, the electric supply or other authority shall take such steps as may be necessary to make the wires safe.
- (3) The owner of scaffolding shall (if required) pay the electric supply or other authority, in advance, the cost of removing, or making safe, any wires.

Working near live electric wires. 69. (1) A person shall not carry out any work in such a position as may make it possible for him or any other person to come in contact with any live electric wires that have not been made safe pursuant to this Division.

- (2) All live wires that would be within a distance of 15 ft. of any scaffolding or gear to be erected shall be adequately insulated, effectively shielded or have the power completely cut off, prior to the commencing of the erection of the scaffolding or gear.
- (3) Bare wires shall not be used to supply light or power to any apparatus or plant on, or under, any scaffold.
- (4) Live wires shall not be attached to any scaffolding or gear without the approval in writing of an Inspector, and an Inspector shall not give his approval unless the wires are encased in approved insulated cable.

Division 3.—Periodical Inspection of Scaffolding and Gear.

70. (1) All scaffolding and gear shall be examined by an InDuties of Inspectors. spector, at least once in every three months, during the period that it is erected or in use.

- (2) Where on any examination, whether made pursuant to this Division, or not, an Inspector considers any scaffolding or gear or any part of it to be unsafe, he shall mark it accordingly; and the scaffolding or gear or the part so marked shall not thereupon be used, until replaced or made good to the satisfaction of an Inspector.
- (3) Every person who removes or obliterates any marking made on scaffolding or gear pursuant to this regulation commits an offence.

PART VI-MISCELLANEOUS SAFETY PROVISIONS.

71. (1) Every flagpole erected on a building shall be so erected, Flagpoles. by hinging or otherwise, as to enable it to be lowered to a horizontal position or to be dismantled, for the carrying out of painting or repairs, in safety.

- (2) A ladder shall not be used for the purpose of painting or repairing a flagpole and, where the flagpole is such as cannot be lowered or dismantled, the painting or repairs shall be effected by the use of approved scaffolding.
 - (1) Every person entering, or employed on, works-

Industrial helmets.

- (a) exceeding, or likely to exceed a height of 20 ft., above ground level or above water level; or
- (b) on which scaffolding is erected to a height exceeding 12 ft.; or
- (c) at a depth exceeding 6 ft., below ground level,

shall, except where working under permanent overhead protection or where exempted under the provisions of this regulation, wear and approved industrial safety helmet.

- (2) Every industrial safety helmet shall conform to S.A.A. No. Z.10—1961, and shall be fitted with clean head harness such as may comfortably be adjusted to any size and cradle the back of the head to eliminate forward movement, and shall be fitted with a chin strap.
- (3) The Chief Iinspector may exempt from the provisions of this regulation any person who produces adequate proof of his inability to wear a safety helmet.
- (4) The owner shall cause a readily legible notice, bearing the words, "SAFETY HELMET AREA. HELMETS MUST BE WORN ON THESE WORKS.", in lettering 4 in., in height, to be displayed at the main entrances of every works on which helmets are required, by this regulation, to be worn.

Use of respirators.

73. A suitable respirator shall be used by every person working on works in a confined space in which a carborundum cutting saw or similar apparatus is consistently used.

Inspectors may direct use of safety apparel and equipment. 74. Where, in the opinion of an Inspector, industrial safety equipment or apparel, including special footwear, is necessary for the safety of workmen or other persons on works, he may direct that such equipment or apparel be used and effect shall be given to that direction.

PART VII-ROOFS SHEATHED WITH BRITTLE MATERIALS.

Interpreta-

- 75. In this Part, unless the contrary intention appears-
 - "large section sheets" means corrugated asbestos cement sheets of a material of not less than ¼ in., in thickness, having corrugations 1¾ in. and over in depth, the pitch of the corrugations being more than 3 in. but not more than 5¾ in., measured from centre to centre of adjacent crests or troughs;
 - "small section sheets" means corrugated asbestos cement sheets of a material of not less than 7/32 in., in thickness, having corrugations less than 1½ in. in depth, the pitch of the corrugations being 3 in. or less, measured from centre to centre of adjacent crests or troughs.
 - "safety-mesh" means a mesh-work of galvanised steel wires of size and arrangement specified in these regulations;
 - "longitudinal wires" means the safety mesh wires parallel to the corrugations of the roof sheathing;
 - "transverse wires" means the safety mesh wires at right angles to the corrugations of the roof sheathing.

Distances between supports.

- 76. Purlins, or other immediate supports, for corrugated asbestos cement roof sheathing shall be spaced, when measured from centre to centre—
 - (a) not more than 4 ft. apart, measured in the direction of the corrugations, where supporting large section sheets:
 - (b) not more than 3 ft. apart, measured in the direction of the corrugations, where supporting small section sheets; or
 - (c) not more than the maximum distance approved in writing by the Chief Inspector where supporting sheets differing in section from those mentioned in paragraphs (a) and (b) of this regulation.

Use of safety mesh.

- 77. (1) Subject to subregulations (2), (3) and (4) of this regulation, a person shall not place, lay or fix, or cause to be placed, laid or fixed upon any roof structure, or part of any roof structure, a roof sheathing of asbestos cement, unless safety mesh has first been securely fixed to the roof structure, in the manner prescribed by these regulations.
- (2) The provisions of subregulation (1) of this regulation do not apply to a roof of which the members immediately supporting corrugated asbestos cement sheathing are spaced—
 - (a) not more than 18 in. apart, measured from centre to centre, for small section sheets; or
 - (b) not more than 24 in. apart, measured from centre to centre, for large section sheets.
- (3) The provisions of subregulation (1) of this regulation do not apply to a roof of which the area is sheeted, on the top of the members immediately supporting the corrugated asbestos, with material approved by the Chief Inspector and capable of sustaining a central load of 400 lb. on a span of 4 ft.

- (4) Subregulation (1) of this regulation does not apply where safety mesh, if used, would be likely to be affected by corrosive agencies, and in such a case the roof members immediately supporting the corrugated asbestos cement sheathing shall be spaced as prescribed by subregulation (2) of this regulation.
 - 78. (1) Safety mesh shall be so constructed that-

Construction of safety mesh.

- (a) it is made entirely of galvanised wire having a breaking strain of not less than 1,010 lb.;
- (b) the size of each mesh is not greater than 12 in. x 12 in.;
- (c) the wires forming each corner of each mesh are welded, or otherwise affixed one to the other, so as to preclude movement at their junction; and
- (d) it conforms to such standards and specifications as may be specially approved in writing by the Chief Inspector.
- (2) Notwithstanding the provisions of subregulation (1) of this regulation, safety mesh shall be deemed not to conform to the provisions of these regulations, unless a complete specification and such specimens of the mesh, as may be required in writing for examination by the Chief Inspector, have been submitted to, and approved by, him.
 - 79. (1) In this regluation—
 "anchorages" includes purlins;

Fixing of safety mesh.

- "staples" means galvanised steel staples of a size designated by the Chief Inspector.
- (2) Subject to subregulation (3) of this regulation, safety mesh shall be fixed to the anchorages, so that the longitudinal wires—
 - (a) are taken over the top of, and bent down and fixed to the side of, every anchorage with staples; or
 - (b) are fixed to the tops of every anchorage with staples; or
 - (c) are passed once completely around every anchorage and the tail of each wire is twisted twice tightly around the main portion of the same wire.
- (3) In fixing safety mesh with staples a staple shall, in the case of each longitudinal wire of the mesh, be driven into each anchorage—
 - (a) in such a position that a transverse wire is immediately behind the staple and is between the staple and the end of the longitudinal wire; or
 - (b) so that the longitudinal wire, once stapled, is bent back, and again stapled, over the main portion of the same wire.
- (4) Safety mesh shall be fixed, generally, in such a manner that—
 - (a) it rests upon each of the purlins or battens;
 - (b) it is free from perceptible sag;
 - (c) it is immediately beneath the roof sheathing;
 - (d) the transverse wires are located above the longitudinal wires;
 - (e) where a break of continuity in the longitudinal wires occurs, those wires are effectively joined so as to preserve the same measure of safety as that afforded by continuous wires; and
 - (f) the longitudinal wires at the adjoining or overlapping edges of adjacent strips of safety mesh are strongly fastened together at intervals not greater than 3 ft.

Other brittle materials.

- 80. (1) Where asbestos cement box-gutter sections are used, the gutter supports shall be spaced not more than 30 in. apart, measured from centre to centre, or a suitable gutter board shall be fixed immediately under, and supporting, the box-gutter sections.
- (2) Any other materials considered by the Chief Inspector to be brittle roof materials shall be fixed in a manner approved by him.

Inspectors may inspect and order compliance with regulation 77

- 81. (1) Where no means of access is provided to the underside of a roof sheathed with asbestos cement or other brittle material, the owner, contractor or the person in charge shall, if required by an Inspector, remove portion of the roof sheathing so that the spacings of the roof battens or purlins may be inspected.
- (2) Where, upon inspection made pursuant to this regulation, it appears to an Inspector that the provisions of regulation 77 have not been complied with, he may, by notice in writing, order such things to be done as may, in his opinion, be necessary to bring about compliance with that regulation.
- (3) Where, upon an inspection made pursuant to this regulation, it appears to an Inspector that the safety mesh has, or its fastenings or supports have been reduced in strength, by corrosive or other action, to less than 90 per cent of the strength prescribed by regulation 78, the Inspector shall give to the owner of the building so affected notice in writing to renew the mesh, fastenings or supports (as the case may require), in such a manner as the notice may direct.

PART VIII-EXPLOSIVE-POWERED TOOLS.

Division 1—Operators and Tools, Generally.

Interpreta-

- 82. (1) In this Part, unless the contrary intention appears—
 "authorised person" means a person—
 - (a) who makes tools, and includes a person authorised by him to repair tools;
 - (b) who is the holder of a licence, under the Firearms and Guns Act, 1931, to manufacture and repair firearms or to deal in firearms;
 - (c) a person working under the direct supervision of a person referred to in paragraph (a) or paragraph (b) of this interpretation;
 - "defect" means any defect that may impair or affect the safe and normal operation of a tool;
 - "repair" includes renovate, modify, alter or adjust, or attempt to do any of those things;
 - "projectile" means stud, pin, dowel, screw, rivet, spike, nail or other object driven, or adapted or intended to be driven, against, into or through any substance by means of a tool;
 - "qualified operator" means a person registered as being qualified under these regulations to operate any tool or tools described in the certificate of registration issued pursuant to these regulations;
 - "tool" means a tool whereby a projectile may be driven against, into or through any substance by means of an explosive charge and includes every attachment to, and accessory of, such a tool and every device used, or adapted or intended to be used, therewith, but does not include a firearm within the meaning of the Firearms and Guns Act, 1931.
- (2) For the purpose of these regulations a person is deemed to use a tool if he loads, unloads or discharges it or attempts to do any of those things.

83. (1) If the Chief Inspector is satisfied that a person-

Qualified

- (a) is over the age of 18 years:
- (b) is proficient in the safe use, adustment, assembly and taking apart of any tool or tools;
- (c) is not suffering from any defect of colour vision that would render him unfit to use a tool; and
- (d) has a thorough knowledge of this Part.

he may register that person as a qualified operator, by entering his name and address, and the type or types of tool that he is qualified to operate, in a register kept for that purpose, and shall, thereupon, issue him a certificate in the form of Form G, setting out in the certificate the type or types of tool that he is qualified to operate, under this Part.

- (2) For the purposes of subregulation (1) of this regulation, the fact that a person has attended a course of instruction, approved by the Chief Inspector, in the use of tools or has, in any event, passed a proficiency test set by the person or body conducting the course, may be accepted by the Chief Inspector as evidence of that person's proficiency in the safe use, adjustment, assembly and taking apart of any tool or tools.
- (3) The Chief Inspector may be satisfied that a person is not suffering from any defect of colour vision, on the production of a certificate to that effect, given by a legally qualified medical practitioner, or on passing a test to the satisfaction of the Chief Inspector.
- (4) Nothing in this regulation requires an authorised person, within the meaning of this Part, to be registered, or hold a certificate of registration, as a qualified operator.
- (1) Subject to subregulation (2) of this regulation, every person who-

(a) not being a qualified operator, uses any tool; or

Tools to be operated by qualified operators only.

requirements for

tools and

- (b) employs, or permits, some other person, not being a qualified operator or, being physically incapacitated, to use any tool, commits an offence.
- (2) Nothing in subregulation (1) of this regulation applies to a person who, while receiving training to become a qualified operator, uses a tool under the immediate and personal supervision of a qualified operator.
- A person shall not sell, offer for sale, hire out, lend, use, General or cause to be used, any tool, unless-
 - (a) it corresponds, in all respects, with an approved specimen:
 - (b) a notice is permanently engraved or embossed upon the tool, in a conspicious position, so as to be clearly legible at all times, reading as follows:

DO NOT REMOVE THIS TOOL FROM THE WORK SURFACE FOR AT LEAST 10 SECONDS, AFTER IT HAS FAILED TO FIRE.;

- (c) a clearly legible serial number, by which it may be readily identified, is permanently engraved or embossed upon the tool;
- (d) it has a protective shield or device attached to its muzzle end in such a manner— $\,$
 - (i) as effectually to arrest the escape of projectiles and other objects and particles, liberated by the discharge of the tool; and

(ii) that the outer edge is not, at any point, closer to the centre of the barrel than a distance of 2 in., except where the tool is to be used in the circumstances mentioned in subregulation (2) of regulation 97.

Application for approval of tools.

- 86. (1) Every person applying for approval of a tool shall submit to the Chief Inspector— $\,$
 - (a) a specimen of the tool, to enable the determination, by examination and tests, of its functioning and characteristics:
 - (b) such samples of the materials used in the construction of the tool as the Chief Inspector may, from time to time, require;
 - (c) fully dimensioned drawings and specifications of the tool such as will establish its pattern, detailed construction and nature; and
 - (d) such further information in writing as may be required by the Chief Inspector for any of the purposes of this regulation.
- (2) Any specimen tool, samples of materials, drawing, specifications and other written information, submitted in accordance with this regulation, may be retained by the Chief Inspector.
- (3) Every person applying for approval of a tool shall satisfy the Chief Inspector that the tool is such as— $\,$
 - (a) will not be discharged if dropped on a concrete floor from a height of 10 ft.;
 - (b) may not be discharged by an operator, except when a load of not less than 25 lb. is being applied by the operator to the springs of the breech and firing mechanisms;
 - (c) may not be accidentally discharged while being handled; and
 - (d) may not be discharged, if the axis of the barrel of the tool deviates by more than 6 degrees from the perpendicular to the surface into which a projectile is to be fired.
- (4) Where the Chief Inspector is satisfied that any specimen of a tool is so manufactured as to be in accordance with these regulations, he shall grant his approval thereof and notify that approval in the *Government Gazette* and shall, by every such notice, specify the manner in which such tool is to be described, for the purposes of these regulations.
- (5) Every person who falsely represents that a tool corresponds with a specimen approved under these regulations, whether by marking it or in any other manner, commits an offence.
- $\mbox{(6)}$ The owner shall, if required by the Chief Inspector submit any tool to him, for examination.

Registration of tools.

- 87. (1) The Chief Inspector shall cause a register to be kept, in which shall be entered the type and serial number of every tool in use and the name and address of the owner.
- (2) Every person who sells a tool shall, within forty-eight hours of the sale, notify the Chief Inspector, in writing, of that fact and of the type and serial number of the tool and of the name and address of the purchaser.
- (3) Every purchaser of a tool shall, within forty-eight hours of his obtaining possession of it, notify the Chief Inspector, in writing, of the type and serial number of the tool and of his name and address.

- (4) A document signed by the Chief Inspector, stating that a person is registered under this regulation as the owner of any tool is prima facie evidence that that person is the owner of the tool.
 - (5) In this regulation, "owner" means legal owner.
 - 88. (1) The owner shall cause every tool in his possession— Inspection
 - (a) to be inspected for defects, by a qualified operator, immediately prior to its first use, on any day; and
 - (b) to be dismantled and examined for defects, by a qualified operator, before being again used, after every 60 hours of use, in the aggregate; and
 - (c) to be completely overhauled, by an authorised person, at least once in every period of twelve months.
 - (2) The owner shall not use a tool or cause it to be used unless-
 - (a) it has been inspected, examined and overhauled pursuant to this regulation;
 - (b) it is free from any defect that has been revealed on any inspection, examination or overhaul, whether pursuant to this regulation, or not; and
 - (c) after an overhaul, carried out pursuant to paragraph (c) of subregulation (1) of this regulation, the authorised person who carried out the overhaul issues a certificate, in the form of Form J in the schedule, that the tool is free from defects.
- (3) An Inspector may declare any tool unsafe for use and the owner shall thereupon cause such tool to be removed from service, until it has been repaired and a certificate in the form of Form J in the Schedule has been issued, by an authorised person, in respect of the tool.
- 89. (1) A person other than an authorised person shall not Repair repair a tool; but a qualified operator or other person who, under the immediate supervision and control of a qualified operator, is being trained as a qualified operator is not deemed to repair a tool, by reason only of his making, or attempting to make, such minor adjustments as are incidental to its ordinary operation.

(2) A person shall not

- (a) employ, cause or permit any person, other than an authorised person, to repair a tool;
- (b) knowing that a tool has been repaired by a person other than an authorised person, use or employ, cause or permit any person to use, that tool, unless, since being so repaired it has been overhauled by an authorised person; or
- (c) at any time repair a tool, in such a way that, when repaired, it does not correspond with a specimen tool approved under these regulations.

Division 2-Use of Tools.

- A person, knowing that a tool has any defect, shall not use, or employ, or cause or permit any person to use, that tool.
- 91. (1) A person shall not use a tool for driving a projectile Limitation of use. into-
 - (a) any hard substance:
 - (b) any readily shatterable substance;
 - (c) any concrete that contains aggregate which will not pass wholly through a 1 in. mesh screen;

Use of defective hibited.

- (d) any reinforced concrete, where the projectile may penetrate further than three-quarters of the distance, measured from the place of entry on the face of the concrete, to the nearest surface of reinforcing; or
- (e) any material containing, within that part of its aggregate that the projectile is to penetrate, any object that would deflect the projectile from a straight path.
- (2) A person shall not use a tool so as to drive a projectile—
 - (a) so close to the edge of any substance, or to any hole in the substance, as to occasion danger of the substance cracking or breaking or of the projectile escaping therefrom;
 - (b) within $\frac{1}{2}$ in. of the edge of any steel; or
 - (c) into any brick, concrete or similar substance that is within 3 in. of an edge of a structure of which it forms a part.
- (3) In this regulation-
 - "hard substance" means any unyielding substance and includes high-tensile steel, steel hardened by heat treatment and cast iron;
 - "readily shatterable substance" includes tile, terra cotta, glazed brick, glass, marble, granite and thin slate.

Use of tools in explosive or dangerous atmospheres prohibited. 92. A person shall not use a tool in the presence of any explosive or inflammable gas, dust or vapour, in compressed air or in any place where the explosive charge may be unintentionally exploded or be rendered dangerous by the presence of heat.

Limitation of explosive charges.

- 93. (1) A person shall not load a tool with any explosive charge that he knows, or would, by reasonable testing, know, to be—
 - (a) in excess of that necessary for the purpose for which the tool is to be used; or
 - (b) of such strength as will cause the whole of the projectile to pass through the substance on which the tool is to be used.
- (2) The provisions of paragraph (b) of subregulation (1) of this regulation do not apply where the substance is backed by such material as is capable of fully absorbing the energy of the projectile.

Strengths of explosive charges to be indicated. 94. A person shall not sell, offer for sale, or have in his possession for sale, any explosive charge for use in a tool, unless the case containing the charge is marked either at the top or at the bottom, with a colour to indicate its relative strength, in accordance with the table to this regulation.

The Table.

Brown—Minimum strength.
Green—Weak.
Yellow—Medium strength.
Red—Strong.
Purple—Very Strong.
White—Especially Strong.
Black—Maximum strength.

Limitation on use of barrel extensions. 95. A person shall not use a barrel extension on a tool, unless there is attached to the extension a protective shield or device such as is mentioned in paragraph (d) of regulation 85.

96. Every person shall, at all times, while using, carrying or handling a loaded tool-

handling tools.

- (a) keep every part of his body clear of the muzzle end of the tool:
- (b) keep the muzzle end of the tool pointed away from any other person; and
- (c) exercise the utmost care to avoid injury to himself and others.
- 97. (1) A person shall not discharge a tool unless-

Discharging of tools

- (a) he is in a safe, well-balanced position that will prevent tilting or misalignment of the tool at the time of firing; and
- (b) the tool is so placed upon the substance into which a projectile is to be driven that the shield or device mentioned in paragraph (d) of regulation 85 will effectively arrest the escape of the projectile and any other objects or any particles liberated by the firing of the
- (2) A person shall not use a tool that is fitted with an interchangeable or adjustable shield or device such as is mentioned in paragraph (d) of regulation 85, in such a manner that the distance between any part of the outer edge of that shield or device and the centre of the barrel is less than 2 in., except where the escape of a projectile, into any area outside the shield, but within a radius of less than 2 in. from the centre of the barrel, would effectively be arrested by other surrounding material.
- Where a person attempts to use a tool on a surface and the charge fails to explode, he shall continue to hold it in the firing position, for at least ten seconds; and, if, after that period, the charge has not exploded, he shall unload the tool or place it in such a position as will eliminate the possibility of a person being injured, in the event of the charge subsequently exploding.

Procedure on

99. A person using a tool shall, after each firing, carefully examine it and shall remove from it any pieces of projectile or explosive charge and any other foreign matter that may be present.

Removal of foreign

100. A person shall not intentionally or negligently fire a tool in such a manner as to cause a projectile to fly free.

Prohibition on allowing projectiles to fly free.

101. A person shall not use in, or with, a tool any projectile, explosive charge, breech plug, barrel extension or adaptor that is not of a type suited to the particular tool and to the purpose for which the tool is being used; and a person shall not use a tool for any purpose, other than that for which it is made or adapted adapted.

Prohibition on use of

102. (1) Where there appears, on a tool, on the container of a tool or in any printed matter supplied with a tool, any instruction, advice or recommendation, not inconsistent with these regulations, as to the safe use of the tool or the use therewith, for reasons of safety, of any substance or thing, that tool, substance or thing shall be used in accordance with that instruction, advice or recommendation.

facturer's be followed.

- (2) Nothing in this regulation requires the use of any named brand, or make, of any substance or thing.
- 103. A person shall not manufacture for sale, or use, with a manufacture tool any explosive charge or prejectile that, if used as intended by equipment the manufacturer, could cause injury to any person.

of injurious equipment prohibited.

Division 3—Care and Storage of Tools and Explosive Charges.

Storage and safe-keeping of tools.

- 104. (1) The owner of a tool shall keep it, or cause it to be kept, in a securely locked container, at all times when it is not required for use, inspection, repair or other essential purpose; and a person shall not take, or keep, a tool out of its container, unless the tool is required for any of those purposes.
- (2) A person shall not leave a tool, or any explosive charge made for use in a tool, unattended, unless effective precautions are taken to ensure that it will not be removed, handled or used by an unauthorised person.
- (3) A person shall not load a tool, other than at the place at which it is to be used or, except where, by reason of mechanical failure, the tool cannot be unloaded, carry or transport a loaded tool from place to place.

Storage of explosive charges.

- 105. (1) Every owner of any explosive charges for a tool shall— $\,$
 - (a) cause them to be kept in a metal container or containers, provided for that purpose; and
 - (b) cause every container in which they are kept, to be, and remain, clearly marked with the words, "EXPLOSIVE CHARGES".
- (2) Every person having the custody for the time being of any explosive charges for a tool shall keep them in the metal container or containers provided for that purpose; and shall—
 - (a) except when explosive charges are being placed therein or removed therefrom, keep the container or containers locked;
 - (b) not permit any person, other than a person using, or assisting in the use of, a tool, to open any container; or
 - (c) not use, or permit any other person to use, the container or containers, except for the storage of explosive charges.

Protective devices.

- 106. (1) The owner of a tool shall provide for the use of every person using, or assisting in the use of, the tool—
 - (a) a device or devices such as will mitigate against the possibility of damage to the hearing of that person; and
 - (b) such spectacles, complying with the S.A.A. specification C7 and CZ7/56, or such other device or devices as will protect the eyes of that person from injury.
- (2) In complying with the provisions of subregulation (1) of this regulation, an owner shall supply such devices only as are of a non-absorbent material and are thoroughly cleansed.
- (3) Every person for whose use a device has been provided pursuant to this regulation shall use it, when using, or assisting in the use of, a tool.

Warning notices to be displayed. 107. (1) At all times when a tool is being used the owner shall cause a notice or notices to be displayed in such a manner as to be clearly legible by all persons who are at, or near, the place where the tool is being used and bearing the words:—

WARNING—EXPLOSIVE-POWERED TOOL IN USE. KEEP CLEAR.

(2) Every notice mentioned in subregulation (1) of this regulation shall be displayed on a rigid, rectangular board, measuring not less than 30 in. in width and 19 in. in depth; the wording shall be in black poster type lettering of not less than 3 in. in height, on a yellow background, and no other matter shall be included on the board.

PART IX—EXAMINATION FOR CERTIFICATES AND LICENSES UNDER THE ACT.

- 102 (1) Every candidate for the position of Inspector of Scaffolding shall-
 - (a) produce satisfactory references from a former employer as to his character and reliability;
 - (b) satisfy the Chief Inspector that he has been engaged for at least seven years in the building industry; and
 - (c) pass an examination, in terms of subregulation (2) of this regulation, to the satisfaction of the Chief Inspector.
- $\ensuremath{(2)}$ Every examination for the purposes of this regulation shall be such as demonstrates that the candidate has—
 - (a) a sound knowledge of arithmetic, up to and including standard embracing square root and the conversion of fractions to decimals;
 - (b) a sound knowledge of the Act and these regulations;
 - (c) a thorough working knowledge of all materials comprised by or used in connection with scaffolding, gear or mechanical gear;
 - (d) a thorough knowledge of the strength of various timbers, and the safe load they will carry in any given position:
 - (e) an ability to construct, and to erect, various kinds of scaffolds used in connection with building or structural operations; and
 - (f) an ability to make a good freehand sketch, or working drawing, of any kind of scaffolding that may be required.
- (1) Every applicant for a license to empower him to act Examinain such employment as may be defined in the license, shall prove his competency by an examination set by the Chief Inspector.

(2) The Chief Inspector may, on the issue of a license, under this regulation, attach such conditions to its operation as he considers necessary.

(3) Upon being satisfied that a licensed person is no longer competent to act in such employment as is defined in the license, or has failed to comply with any condition imposed on its issue, the license may be cancelled or suspended by the Chief Inspector.

PART X-MISCELLANEOUS PROVISIONS.

The clerk of a municipality shall, within seven days after Notification notice of an learning of any building energian on the of building 110. receiving notice of, or learning of, any building operation or the intention to commence any building operation, within the district of his municipality, notify the Chief Inspector thereof, setting out in the notice, with respect to that building operation or proposed building operation, so far as is known-

- (a) the date of notice in respect of it or of learning of it;
- (b) the name and address of the owner of the property;
- (c) the name and address of the contractor (if any) undertaking it;
- (d) its situation;
- (e) its nature;
- (f) its floor area;
- (g) where applicable, the type of its roof covering; and
- (h) its estimated cost.

111. Every person or firm engaging in the hire of any scaffolding or gear that is the subject of these regulations, shall within twenty-four hours after the delivery to the hirer of any such scaffolding or gear, notify the Chief Inspector thereof setting out in the notice, with respect to the scaffolding or gear—

- (a) the date of its delivery;
- (b) the name of the hirer;

Qualification cate for Inspector or Scaffolding and Gear.

censes under

operations by local authorities.

the Act.

Notification by persons and firms engaged in hiring scaffolding and gear.

- (c) the address of site where it is intended to be erected or used:
- (d) its type; and
- (e) by who it is to be erected.

Copy of these regulations to be kept on site.

Powers of inspector in the application of these regulations.

Inspector

Inspector not unduly to interfere with works.

Form of requisition under s. 12 (5) of the Act.

References under s. 12 (5) of the Act.

- 112. Every owner of scaffolding or gear on major works shall cause a copy of these regulations to be kept, for the use of all personnel, in his office on the site.
- 113. Notwithstanding anything to the contrary in these regulations contained, an Inspector may, after taking into consideration the circumstances of any particular case, by notice in writing, modify any regulation, either by adding to, or relieving against, any of its provisions and the regulation shall, thereupon, be of, and take, effect as so modified.
- 114. Without limiting the provisions of regulation 113, it is the duty of every Inspector and officer appointed for the purposes of the Act so to exercise and discharge his powers and duties as not to interfere unreasonably or unduly with any work or process being carried out on any scaffold, or in connection with, any scaffolding or gear.
- 115. A written requisition made pursuant to subsection (5) of section 12 of the Act shall be in the form of Form K in the Schedule.
- 116. (1) An Inspector shall forthwith after his receipt of a requisition given under the provisions of subsection (5) of section 12 of the Act, enter it as a plaint in the Local Court of the district in which the dispute arose or in the Local Court at Perth and the clerk of that court shall fix a day and place for the hearing and determination of the dispute and shall give to the parties written notice thereof, at least six clear days before the date so fixed.
- (2) Subject to the provisions of this regulation, the practice and procedure relating to, and the hearing and determination of, a dispute entered pursuant to this regulation shall, with such adaptations as are necessary, be as provided by the Local Courts Act, 1904, and prescribed by the Local Court Rules, 1961, and for the purposes of those proceedings, the person serving the requisition to refer the matter to a magistrate is the plaintiff and the Inspector is the defendant.
- (3) The determination of a dispute under this regulation shall be given within one month after the date of the hearing.
- (4) Where the magistrate, in determining a dispute under this regulation finds that the notice or order giving rise to the dispute ought not to have been given or made, the notice or order shall be rescinded; otherwise it shall remain of full force and effect.
- (5) The magistrate may, in his discretion, award costs against a party to a dispute heard under the provisions of this regulation and, where costs are awarded against an Inspector, they shall be borne by the Minister; but, in any event, the fees taken and costs and witness fees allowed, for any proceeding under this regulation shall not exceed those prescribed or allowed, by or under the Local Court Rules, 1961, for proceedings where the subject matter exceeds an amount of £50 but does not exceed an amount of £100.

Offences Generally.

- 117. (1) Where any matter or thing is by these regulations required, or forbidden, to be done, or where, pursuant to authority given by these regulations, a person directs any matter or thing to be done, and the matter or thing required or directed to be done is not done, or the matter or thing forbidden to be done is done, then, every person offending against the direction or prohibition is guilty of an offence against these regulations.
- (2) Every person guilty of an offence against any of these regulations is liable to a penalty not exceeding twenty pounds.
- 118. The several forms in the Schedule hereto may, with such alterations and adaptations as circumstances may require, be used for the purposes to which they respectively apply.

Schedule.

Western Australia.

Inspection of Scaffolding Act, 1924 (as amended).

CERTIFICATE OF APPOINTMENT OF INSPECTOR.

Form A.
Regulation 4

	rocgaramon 4.
Mr	te of Western
MINISTER FOR	LABOUR.
Date, 19	
Serial NoSignature	
Western Australia. Inspection of Scaffolding Act, 1924 (as ame	ended).
CERTIFICATE OF APPROVAL	
(Under section 5).	
	Form B.
has been approved by me to act as a Public Inspector in that part of the State that is more than twenty-the General Post Office in the City of Perth are that part of the State exercise the powers of as Scaffolding. Dated this	five miles from and may within in Inspector of
Western Australia.	
Inspection of Scaffolding Act, 1924 (as ame	ended).
NOTICE TO OWNER OF SCAFFOLDING OF	R GEAR.
	Form C.
To	
*(a) the use of scaffolding or gear erected the course of erection or use at	or used or in
to human life or limb; and *(b) the regulations under the above Act complied with.	ū
Now, therefore, I direct you to	
to be used by any workmen or for the support o any workmen or persons on or in the vicinity of the direction is complied with.	r protection of

INSPECTOR OF SCAFFOLDING.

Dated thisday of,19......

^{*} Strike out any paragraph that is not applicable.

Western Australia. Inspection of Scaffolding Act, 1924 (as amended). NOTICE OF INTENTION TO ERECT SCAFFOLDING OR USE GEAR.

(Particulars relating to which are set out below.)

	Form D. Regulation 6.
Builder's Name (Surname) Builder's Address	(Christian Names)
Address of Job (state Lot or No. street and	d suburb)
Class of Building Structure or Work	
Type of Roof Covering Total Cost of Contract or Estimated Cost of Date Signature	f Work £ Fee £
Western Australia.	
Inspection of Scaffolding Act, 192	
ANNUAL NOTIFICATION OF USE OF SC	AFFOLDING OR GEAR. Form E.
Name (Surname) (Chris	stian Names)
Address Location of Scaffolding or Gear	
Description of Gear Annual Inspection Fee Date Signature	
Western Australia	
Inspection of Scaffolding Act, 192	
NOTICE OF INTENTION TO APPLY	
Type of Licence Required Name of Applicant in full	
	hristian Names)
Address Date of Birth	
Where at Present Employed	
Date Signature of Appli	cant
Western Australia Inspection of Scaffolding Act, 192	
LICENCE.	4 (as amended).
This is to certify that	Form G.
has been licensed as	
under and for the purpose of the abovement	entioned Act.
Date	Chief Inspector.

Western Australia.

Inspection of Scaffolding Act, 1924 (as amended).

NOTICE OF ACCIDENT. (Section 15.)

Form H.
Accidents arising from the use of scaffolding or gear that—
(a) cause loss of life to any person;
(b) incapacitate workers for three (3) or more working days;
(c) are due to failure of scaffolding or gear (no persons injured).
Scaffolding or Gear at
Contractor's Name
Name of Injured Person
Occupation of Injured Person
Date of Accident
Cause of Accident
Nature and Extent of Injury
Names of Witnesses to Accident
Nature of Failure of Scaffolding or Gear
Date
Signature of Owner
Name
Address
Note.—This notice to be completed and sent to an Inspector within 24 hours after the occurrence of an accident.

Western Australia.

Inspection of Scaffolding Act, 1924 (as amended). (Section 12 (4).)

NOTICE TO WORKMAN EMPLOYED ON WORKS.

Inspector of Scaffolding.

Date

^{*} Delete that which is inapplicable.

Form J.

Western Australia.

Inspection of Scaffolding Act, 1924 (as amended).

EXPLOSIVE POWERED TOOL.

	Regulation 88.
It is hereby	certified that
	(brand) explosive powered too
Serial No	which was on//
	(date)
been repaired and is free fr	afe for use or submitted for annual overhaul has l and/or* overhauled*, by rom defects and now corresponds with the approved a tool of that type.
	Signature Authorised Person
	Date19
*	Strike out that which is not applicable.
	nis certificate to be completed only by an authorised interpretation of authorised person, see regulation 88
	
	Western Australia.
Inspe	ction of Scaffolding Act, 1924 (as amended).
	Form K. Regulation 115
	No
BETWEEN:	
	Deciminat of Notice
	Recipient of Notice or Owner
an d	
	Inspector.
WHEREAS by you order th	y notice dated the19
Now, the the decision (5) of the Ac	refore, this is to require you to refer this matter to of a magistr ate , under the provisions of section 12 t.
Dated the	d ay of
Entered the .	day of
This requ triplicate, and	isition should be completed by the person giving it, in d all copies should be served on the Inspector.