Government of Ireland Act, 1920, and the several Orders made thereunder, the Ministry of Labour for Northern Ireland hereby revokes, in so far as they relate to Northern Ireland, the provisions concerning First Aid contained in paragraphs 1, 2, 3 and 4 of the Orders, dated 12th October, 1917, and 8th November, 1918, made under Section 7 (1) of the Police, Factories, etc., (Miscellaneous Provisions) Act, 1916, in regard to Blast Furnaces, Copper Mills, Iron Mills, Foundries and Metal Works and in regard to Saw Mills and Factories in which articles of wood are manufactured, respectively.

Given under the Official Seal of the Ministry of Labour for Northern Ireland this eighth day of January, nineteen hundred and twenty-six

H. Conacher,

(L.S.)

Secretary, Ministry of Labour for Northern Ireland.

7, UPPER QUEEN STREET, BELFAST. 8th January, 1926.

# Dangerous and Unhealthy Industries. Building Regulations.

MADE BY THE MINISTRY OF LABOUR FOR NORTHERN IRELAND UNDER SECTION 79 OF THE FACTORY AND WORKSHOP ACT, 1901 (1 Edw. 7, c. 22), IN RESPECT OF CERTAIN BUILDING OPERATIONS.

1926. No. 116.

In pursuance of Section 79 of the Factory and Workshop Act, 1901, the Ministry of Labour for Northern Ireland hereby makes the following Regulations and directs that they shall apply to all premises on which machinery worked by steam, water or other mechanical power is temporarily used for the purpose of the construction of a building, or for the purpose of any addition to the structure of an existing building. Provided that nothing in these Regulations except paragraph 45 shall apply to premises on which the only machinery worked by steam, water or other mechanical power consists—

(a) of machinery which is not used for hoisting purposes and is outside the area of the building under construction, or

(b) of portable tools such as drills or rivetters.

These Regulations may be cited as the Building Regulations (Northern Ireland), 1926, and shall come into force on 1st March, 1927.

#### Definition.\*

In these Regulations "prescribed" means prescribed for the time being by the Ministry of Labour for Northern Ireland.

#### Duties.

It shall be the duty of every contractor and employer of workmen to observe such of the requirements in Part I of these Regulations as affect any workman engaged by him.

It shall be the duty of every person employed to observe Part II of these Regulations and to co-operate with the employers in carrying out Part I of these Regulations.

#### Part I.—Duties of Employers.

- 1. Suitable scaffolding plant shall be provided for workmen where necessary. All scaffolding and appliances connected therewith shall be of sound material and of adequate substance having regard to the purpose for which it is to be used. The parts thereof shall be examined before use as to strength and suitability, and if found defective, shall be repaired; or if not capable of repair, shall not be used as scaffold plant.
- 2. Sufficient material shall be provided for, and shall be used in the construction of, scaffolds, and when in place shall not be removed until the part to be removed is no longer required for working purposes, stability, or safety.
- 3. Pole standards and the legs of gabbard scaffolds shall be vertical and fixed sufficiently close together to secure the stability of the scaffolding having regard to all the circumstances of the case; the ledgers shall be practically level, and the whole scaffold shall be sufficiently and properly braced. Gabbard scaffolds, frames, standards, or other appliances used as supports for working platforms shall be of sound construction, shall have a firm footing and shall be adequately secured, strutted and braced. The legs and needles of gabbard scaffolds shall be securely fastened together by bolts, dogs, clamps, or other effective means.
- 4. Every working platform which is more than five feet above the ground or floor—
  - (a) shall be closely boarded or planked, provided that a space not exceeding three inches may be left between any two boards or planks of a platform used only by plasterers or painters;
  - (b) (i) shall be at least 17 inches wide if used as a footing only and not for the deposit of any material;
    - (ii) shall be at least 34 inches wide if used for the deposit of material:
    - (iii) shall be at least 43 inches wide if used for the support of any higher platform:

<sup>\*</sup> The term to which a defined meaning is given is printed throughout in italics.

Provided that a working platform upon which stone is dressed or roughly shaped shall be at least 51 inches wide and, if used for the support of any higher platform, shall be at least 60 inches wide.

(c) shall, if part of a pole or gabbard scaffold, be at least 42 inches below the top of the standards wherever possible.

Provided that this Regulation shall not apply to a working platform which is on the outside of a roof.

Provided also that a width of at least 10½ inches shall be sufficient for a working platform used for glazing a roof if the said platform is bolted or otherwise firmly fixed at one end to a bracket securely hooked to a purlin and rests securely at the other end on another purlin.

- 5. Every working platform erected on trestles, other than folding trestles, shall, where the trestles are of less height than five feet, be 34 inches wide, except that a width of 17 inches shall be sufficient in the case of a platform primarily used as a footing only and not used for the deposit of any material.
- 6. No trestle scaffold of more than three tiers or exceeding a height of 15 feet from the ground or floor shall be used.
- 7. Every board or plank forming part of a working platform or run shall be supported at proper distances and near each end by a putlog or other support, and no such board or plank shall project beyond its end support to a distance exceeding four times the thickness of the board or plank.
- 8. Where there is a space between a wall and a platform used for plastering the wall, this space shall not exceed 18 inches in breadth.
- 9.—(a) Boards or planks which exceed  $1\frac{1}{2}$  inches in thickness and form part of a working platform or run shall not overlap each other. Provided that this Regulation shall not apply to any platform or run supported by trestles or by a gabbard scaffold if steps, such as the provision of bevelled pieces, are taken to reduce to a minimum the risk of tripping.
- (b) Boards or planks which form part of a run mainly used for the movement of barrows shall not overlap each other unless steps, such as the provision of bevelled pieces, are taken to facilitate the movement of the barrows.
- 10. Every gangway or run shall be at least 17 inches wide when any part is more than 5 feet above the ground or floor except a gangway or run leading to a plasterer's scaffolding in the interior of a room or place in which the height from the floor to the ceiling does not exceed 14 feet. All planks forming a gangway or run shall be so fixed and supported as will prevent undue or unequal sagging. When the slope renders additional foothold necessary,

proper stepping laths the full width of the gangway shall be provided at suitable intervals not exceeding two feet.

Provided that this Regulation shall not apply to any run which is of a width of at least 11 inches and is of adequate thickness and is mainly used for the movement of barrows unless—

- (a) the said run reaches a height of more than 5 feet above the ground, or unless
- (b) the said run is placed over an excavation which is more than 7 feet deep and 10 feet across.
- 11. No working platform, run or gangway more than 2 feet above the ground or floor shall be supported by loose bricks, drain pipes, chimney pots or other unsuitable material.
- 12. No working platform, gangway or run shall be used for working upon until its construction is completed and the safeguards required by these Regulations properly fixed.
- 13. Where a scaffold has not been erected by or under the superintendence of the employer whose workmen are to use it, the said employer, before allowing work to proceed thereon, and during such period as any person employed by him is engaged thereon, shall satisfy himself, either personally or by his agent, that the scaffolding is in a stable condition, and that the materials used in its construction are sound, and that the required safeguards are in position. During the usage of the scaffolding due regard shall be paid to its carrying capacity.
- 14. Scaffolding in use shall be examined once a month by a competent person deputed by the employer responsible for the scaffolding, who shall within three days of his examination make an entry in the *prescribed* register to the effect that he has examined the scaffolding and its fittings and connections, and showing the *prescribed* particulars of the result of his examination. The register shall be kept on the premises to which the Regulations apply.
- 15. Every working-place and approach thereto shall be efficiently lighted.
- 16. Every gangway and staircase shall be kept free from any unnecessary obstruction, and if over 12 feet from the ground or floor, shall be provided with a suitable handrail or other efficient means to prevent the fall of persons, except where and when access is required for workmen or for the movement of material.

Provided that this Regulation shall not apply to a temporary gangway used only in connection with glazing or with the erection of ironwork or steelwork.

17. Every working platform which is supported by trestles and is more than 14 feet from the ground, gantry or floor, and every working platform which is otherwise supported and is more than 12 feet above the ground, gantry or floor, shall where practicable and while in actual use be provided on the side away from the

wall and at each end with a suitable guard rail and toe-board or with other efficient means to prevent the fall of persons or articler from the platform, except where and when access is required for workmen or for the movement of material.

Provided that this Regulation shall not apply to a working platform which is on the outside of a roof, nor to a working platform which is used only by glaziers or by rivetters or bolters-up in ironwork or steelwork.

. Provided also that a toe-board shall not be required on a working platform used only by plasterers or painters.

- 18. Every pole used for scaffolding shall have the bark stripped off.
- 19. At least one-third of the putlogs used for supporting any working platform more than 12 feet above the ground or floor shall remain in position until the scaffolding is finally removed, and one half of the number so remaining shall be securely fastened.
- 20. Every employer shall post notices on premises to which these Regulations apply stating that no pole, plank, chain, rope or other material shall be thrown from a scaffold, floor, window, or other opening over 20 feet above the ground, but shall be properly lowered.
- 21. No person shall be employed on the outside of any roof which has a pitch of over 34 degrees, unless a parapet wall, railings, an outside working platform or other efficient means are maintained to prevent the said person from falling from the edge of the roof.

Provided that this Regulation shall not apply to:

- (a) a roof the eaves of which are less than 22 feet above the ground, or to
- (b) a person employed in the erection of any ironwork or steelwork other than roof covering.
- ·22. No person shall be employed on extensive work on the outside of any roof which has a pitch of over 34 degrees unless the following facilities are provided thereon:—

 a suitable working platform, securely supported and of a width of not less than 8½ inches, and

(b) suitable and sufficient ladders, duck ladders, or crawling boards, properly secured.

Provided that this Regulation shall not apply to a person employed in the erection of ironwork or steelwork.

- 23. No scaffold shall be supported by a cast-iron eaves gutter.
- 24. Cantilever or jib scaffolding shall be constructed of materials of adequate strength, securely fixed and achored from the inside, and of sufficient length to ensure stability and shall also be properly braced and supported.

- 25. When bedding window frames a platform shall be provided to enable workmen to perform their task without danger to themselves or those below them.
- 26. No suspended scaffold shall be used unless it complies with the following requirements:—

(a) The platform shall be at least 17 inches wide and of

adequate strength.

(b) The means of suspension shall be of adequate strength firmly secured. If a weight is used for the purpose of suspension, this weight shall be adequate having regard to all the circumstances of the case.

(c) The scaffold shall be provided with a suitable guard rail and toe-board, or other efficient means to prevent the

fall of persons or articles from the platform.

Trestles or other means of increasing the height of the working platform shall not be used on suspended scaffolds.

When a skip or large basket is used as a suspended scaffold for one man, it shall not be less than 2 feet 6 inches deep, and shall be carried by two strong iron bands properly fastened and continued round sides and bottom, with eyes in the iron to receive the ropes.

27. No working platform resting on wooden bearers let into the wall at one end and without other support shall be used unless the bearers go right through the wall, are securely fastened, and are of sufficient strength.

No figure or bracket scaffold supported or held by dogs or spikes driven into the wall shall be used.

- 28. Planks supported by ladders, steps, or folding trestles, shall be of adequate width and thickness. Where steps are used, the platform shall not exceed 7 feet in height.
- 29. Every ladder used as a means of communication shall rise at least 5 feet above the place of landing, shall not stand on loose bricks or other loose packing, but shall have a level and firm footing, and shall be securely fixed so that it cannot move from its top point of rest; undue sagging shall be prevented. Every ladder which cannot be secured at the top, shall, if over 25 feet in length, have a man stationed at the foot to prevent slipping, or shall be securely fastened at the base. A ladder having a missing or defective rung shall not be used.

No ladder made of sawn timber shall be used unless of adequate

strength and the steps securely notched in or housed.

30. Every opening left in a floor of a building or in a working platform for an elevator shaft or stairway, or for the hoisting of material, or for access by workmen, or for any other purpose, shall, until it becomes necessary to remove the fencing in order

to complete the permanent enclosure, be provided with a suitable guard rail and toe-board or with other efficient means to prevent the fall of persons or articles into the opening, except where and when access is required for workmen or for the movement of material.

- 31. Any part of the premises in which any person is habitually employed shall be covered in such a manner as to protect any person who is working in that part from being struck by any falling material or article.
- 32. The stage for every crane shall be built of sound material, shall be of good mechanical construction having regard to its height and the lifting and reaching capacity of the crane. The crane shall be securely anchored or weighted. The platforms for the driver and signalman shall be of sufficient area, close-planked, securely fenced, and provided with safe means of access.
- 33. On every stage, gantry or other place on which a crane moves an unobstructed passageway of at least 2 feet in width shall be maintained at every position of the crane between the cab or any other part of the crane and the edge of such stage, gantry or place, and between the cab or any other part of the crane and any steelwork or other material placed near the crane rails.
- 34. The working gear and anchoring appliances of every crane, crab or winch and other hoisting apparatus shall be kept in good repair and in good working order, and shall, as far as practicable, be examined in position at least once in every week by a competent person. The results of this examination shall be entered forthwith in the *prescribed* register. Every hoisting rope or chain shall be securely fastened to the barrel of the crane, crab or winch with which it is used.
- 35. Every crane, crab and winch shall be provided with an efficient brake or brakes and shall have the safe working load plainly marked upon it. If the safe working load of a crane may be varied by the raising or lowering of the jib or otherwise an automatic indicator of the safe working loads, or a table showing the safe working loads, at the corresponding inclinations of the jib shall be attached to the crane.

The lever controlling the link-motion reversing gear of every steam crane shall be provided with a suitable spring-locking arrangement.

Every hoisting machine, and all tackle, or apparatus, and all appliances connected therewith, shall be of good mechanical construction, sound material, and of adequate substance, and shall be properly and securely fixed and of suitable strength.

No rope shall be used over a pulley block if its diameter exceeds the diameter of the grooves of the block.

- 36. No crane or gear shall be loaded beyond the safe load. No load shall be left suspended from a crane unless there is a competent person actually in charge whilst the load is so suspended.
- 37. Every chain used on the premises for hoisting or lowering shall—

(a) have been tested;

(b) be inspected by the foreman or other responsible person immediately before each occasion on which it is used in hoisting or lowering unless it has been so inspected within the preceding three months;

(c) if in general use, be annealed once at least in every 14 months unless it has been subjected to such other heat treatment as the Ministry of Labour for Northern

Ireland may sanction; and

(d) shall be legibly marked in plain figures and letters with an identifying number or description and with the safe working load of the chain.

The prescribed particulars of every such chain shall be entered into or attached to a register which shall be kept on the premises or at the head office of the employer of the person or persons using the chain.

This register shall at all reasonable times be open to inspection by an Inspector and the employer shall send to the Ministry of Labour for Northern Ireland such extracts therefrom as the Ministry may from time to time require.

- 38. Every crane driver shall be properly qualified. No person under 18 years of age shall be employed to give signals to a crane driver.
- 39. When any hoisting or lowering is performed by means of a crane which is in such a position that the crane driver is unable to see the load in all its positions a look-out man shall be employed to give the necessary signals to the driver.
- 40. Every signal for hoisting or lowering shall be such as can be readily heard or seen, and shall be distinctive in its meaning to the person who has to act upon it. Where a sound signal is used, the signal shall be made by an efficient gong, whistle or electric apparatus or other efficient means. Every signal wire shall be protected from accidental interference.
- 41. Every box used for hoisting bricks or other loose material shall be closed in, except on one side. One or more of the sides may be hinged or securely slotted.

- 42. Every hook used for hoisting or lowering shall either be provided with an efficient spring catch to prevent the displacement of the sling from the hook or shall be of such a shape as to reduce as far as possible the risk of such displacement.
- 43. No basket depending entirely for support on its handles shall be used for hoisting or lowering.

In hoisting a barrow, the wheel shall not be used as a means of support unless efficient steps are taken to prevent the axle from slipping through the bearing.

44. All rails on which a travelling crane moves shall be of uniform section, shall be secured by fishplates, and shall be securely fastened to sleepers.

Provided that this Regulation shall not apply to an overhead

crane on bridge rails.

- 45. The flywheel of every engine, all dangerous parts of the machinery, and every part of the mill-gearing shall be securely fenced, or be in such a position or of such construction as to be equally safe to every person employed as they would be if they were securely fenced. Every water-gauge glass on a steam boiler shall be adequately protected by a guard. All electrical apparatus and electrical conductors shall be so installed and protected as to prevent danger to any person employed.
- 46. When necessary, in all excavations, timber struts, waling planks and boards shall be provided and used; and in works of underpinning, the adjacent walls and ground shall be properly shored and strutted, if necessary.
- 47. There shall be provided in a readily accessible position or positions a sufficient number of "First Aid" boxes or cupboards. Each such box or cupboard shall contain such materials and equipment as may be *prescribed*, shall be distinctively marked, and if newly provided after the date on which these Regulations come into force shall be plainly marked with a white cross on a red ground.
- 48. No ironwork or steelwork on which there is wet paint shall be handled on the premises. Provided that this Regulation shall not apply to the painting of ironwork or steelwork on the premises.

### Part II.—Duties of Workmen.

49. Every person employed shall co-operate with the employers in carrying out Part I of these Regulations, and shall report to the employer or foreman any defect he may discover in the plant or appliances.

- 50. No person employed shall interfere with, take away, or destroy any of the plant or safeguards required by these Regulations without the authority of the employer or his responsible foreman.
- 51. No person employed shall be lifted or carried by a crane (except on the driver's platform) or ride in a barrow hoist, or in a hod hoist, or adopt other unsafe means of getting about the building, but every such person shall use the gangways, ladders or staircases or other safe means provided for the purpose.

(L.S.)

H. Conacher, Secretary,

Ministry of Labour for Northern Ireland.

7 UPPER QUEEN STREET, BELFAST, 10TH NOVEMBER, 1926.

## Dangerous and Unhealthy Industries. Grinding of Metals (Miscellaneous Industries).

MADE BY THE MINISTRY OF LABOUR FOR NORTHERN IRELAND UNDER SECTION 79 OF THE FACTORY AND WORKSHOP ACT, 1901 (1 Edw. 7, c. 22), for the Grinding or Glazing of Metals, or Processes incidental to the Grinding of Metals, or the Cleaning of Castings.

1926. No. 88.

In pursuance of Section 79 of the Factory and Workshop Act, 1901, the Government of Ireland Act, 1920, and the several Orders made thereunder, the Ministry of Labour for Northern Ireland (hereinafter referred to as "the Ministry") hereby makes the following Regulations, and directs that they shall apply to all factories or parts thereof in which is carried on the grinding or glazing of metals, or any process incidental to the grinding of metals, or the cleaning of castings.

These Regulations may be cited as the Grinding of Metals (Miscellaneous Industries) Regulations (Northern Ireland), 1926, and shall come into force on the 1st November, 1926, except that Regulations 2, 4, 5 and 6 shall not apply until two years after the said date.

### Definitions.\*

For the purpose of these Regulations:—

Grindstone means a grindstone composed of natural or manufactured sandstone, but does not include a metal wheel or cylinder into which blocks of natural or manufactured sandstone are fitted.

<sup>\*</sup> Terms to which defined meanings are given are printed throughout in italics.