#### STATUTORY RULES OF NORTHERN IRELAND

# 2016 No. 146

# The Construction (Design and Management) Regulations (Northern Ireland) 2016

# PART 4

# GENERAL REQUIREMENTS FOR ALL CONSTRUCTION SITES

# **Application of Part 4**

- **16.**—(1) This Part applies only to a construction site.
- (2) A contractor carrying out construction work shall comply with the requirements of this Part so far as they affect the contractor or any worker under the control of the contractor or relate to matters within the contractor's control.
- (3) A domestic client who controls the way in which any construction work is carried out by a person at work shall comply with the requirements of this Part so far as they relate to matters within the client's control.

### Safe places of construction work

- 17.—(1) There shall, so far as is reasonably practicable, be suitable and sufficient safe access to and egress from—
  - (a) every construction site to every other place provided for the use of any person whilst at work; and
  - (b) every place construction work is being carried out to every other place to which workers have access within a construction site.
- (2) A construction site shall be, so far as is reasonably practicable, made and kept safe for, and without risks to, the health of a person at work there.
- (3) Action shall be taken to ensure, so far as is reasonably practicable, that no person uses access to or egress from or gains access to any construction site which does not comply with the requirements of paragraph (1) or (2).
- (4) A construction site shall, so far as is reasonably practicable, have sufficient working space and be arranged so that it is suitable for any person who is working or who is likely to work there, taking account of any necessary work equipment likely to be used there.

# Good order and site security

**18.**—(1) Each part of a construction site shall, so far as is reasonably practicable, be kept in good order and those parts in which construction work is being carried out shall be kept in a reasonable state of cleanliness.

- (2) Where necessary in the interests of health and safety, a construction site shall, so far as is reasonably practicable, and in accordance with the level of risk posed, comply with either or both of the following—
  - (a) have its perimeter identified by suitable signs and be arranged so that its extent is readily identifiable; or
  - (b) be fenced off.
  - (3) No timber or other material with projecting nails (or similar sharp object) shall—
    - (a) be used in any construction work; or
    - (b) be allowed to remain in any place,

if the nails (or similar sharp object) may be a source of danger to any person.

# Stability of structures

- 19.—(1) All practicable steps shall be taken, where necessary to prevent danger to any person, to ensure that any new or existing structure does not collapse if, due to the carrying out of construction work, it—
  - (a) may become unstable; or
  - (b) is in a temporary state of weakness or instability.
  - (2) Any buttress, temporary support or temporary structure shall—
    - (a) be of such design and installed and maintained so as to withstand any foreseeable loads which may be imposed on it; and
    - (b) only be used for the purposes for which it was designed and installed and is maintained.
  - (3) A structure shall not be so loaded as to render it unsafe to any person.

# **Demolition or dismantling**

- **20.**—(1) The demolition or dismantling of a structure shall be planned and carried out in such a manner as to prevent danger or, where it is not practicable to prevent it, to reduce danger to as low a level as is reasonably practicable.
- (2) The arrangements for carrying out such demolition or dismantling shall be recorded in writing before the demolition or dismantling work begins.

#### **Excavations**

- **21.**—(1) All practicable steps shall be taken to prevent danger to any person, including, where necessary, the provision of supports or battering, to ensure that—
  - (a) no excavation or part of an excavation collapses;
  - (b) no material forming the walls or roof of, or adjacent to, any excavation is dislodged or falls; and
  - (c) no person is buried or trapped in an excavation by material which is dislodged or falls.
- (2) Suitable and sufficient steps shall be taken to prevent any person, work equipment, or any accumulation of material from falling into any excavation.
- (3) Suitable and sufficient steps shall be taken, where necessary, to prevent any part of an excavation or ground adjacent to it from being overloaded by work equipment or material.
- (4) Construction work shall not be carried out in an excavation where any supports or battering have been provided in accordance with paragraph (1) unless—

- (a) the excavation and any work equipment and materials which may affect its safety have been inspected by a competent person—
  - (i) at the start of the shift in which the work is to be carried out;
  - (ii) after any event likely to have affected the strength or stability of the excavation; and
  - (iii) after any material unintentionally falls or is dislodged; and
- (b) the person who carried out the inspection is satisfied that construction work can be safely carried out there.
- (5) Where the person carrying out an inspection informs the person on whose behalf the inspection is carried out of any matter about which they are not satisfied (under regulation 23(1)), construction work shall not be carried out in the excavation until the matter has been satisfactorily remedied.

#### Cofferdams and caissons

- **22.**—(1) A cofferdam or caisson shall be—
  - (a) of suitable design and construction;
  - (b) appropriately equipped so that workers can gain shelter or escape if water or materials enter it; and
  - (c) properly maintained.
- (2) A cofferdam or caisson shall not be used to carry out construction work unless—
  - (a) the cofferdam or caisson and any work equipment and materials which may affect its safety have been inspected by a competent person—
    - (i) at the start of the shift in which the work is to be carried out; and
    - (ii) after any event likely to have affected the strength or stability of the cofferdam or caisson; and
  - (b) the person who carried out the inspection is satisfied that construction work can be safely carried out there.
- (3) Where the person carrying out an inspection informs the person on whose behalf the inspection is carried out of any matter about which they are not satisfied (under regulation 23(1)), construction work shall not be carried out in the cofferdam or caisson until the matter has been satisfactorily remedied

# Reports of inspections

- **23.**—(1) Where a person who carries out an inspection under regulation 21 or 22 is not satisfied that construction work can be carried out safely at the place inspected, that person shall—
  - (a) inform the person on whose behalf the inspection was carried out, before the end of the shift within which the inspection is completed, of the matters that could give rise to a risk to the safety of any person;
  - (b) prepare a report, which shall include—
    - (i) the name and address of the person on whose behalf the inspection was carried out;
    - (ii) the location of the place of construction work inspected;
    - (iii) a description of the place of construction work or part of that place inspected (including any work equipment and materials);
    - (iv) the date and time of the inspection;
    - (v) details of any matter identified that could give rise to a risk to the safety of any person;

- (vi) details of any action taken as a result of any matter identified in sub-paragraph (v);
- (vii) details of any further action considered necessary; and
- (viii) the name and position of the person making the report; and
- (c) provide the report, or a copy of it, to the person on whose behalf the inspection was carried out, within 24 hours of completing the inspection to which the report relates.
- (2) Where the person who carries out an inspection works under the control of another (whether as an employee or otherwise) the person in control shall ensure the person who carries out the inspection complies with the requirements of paragraph (1).
  - (3) The person on whose behalf the inspection was carried out shall—
    - (a) keep the report or a copy of it available for inspection by an inspector for the Executive—
      - (i) at the site where the inspection was carried out until the construction work is completed; and
      - (ii) after that for 3 months; and
    - (b) send to the inspector such extracts from or copies of the report as the inspector may from time to time require.
- (4) This regulation does not require the preparation of more than one report where more than one inspection is carried out under regulation 21(4)(a)(i) or 22(2)(a)(i) within a 7 day period.

#### **Energy distribution installations**

- **24.**—(1) Where necessary to prevent danger, energy distribution installations shall be suitably located, periodically checked and clearly indicated.
  - (2) Where there is a risk to construction work from overhead electric power cables—
    - (a) they shall be directed away from the area of risk; or
    - (b) the power shall be isolated and, where necessary, earthed.
- (3) If it is not reasonably practicable to comply with paragraph 2(a) or (b), suitable warning notices shall be provided together with one or more of the following—
  - (a) barriers suitable for excluding work equipment which is not needed;
  - (b) suspended protections where vehicles need to pass beneath the cables; or
  - (c) measures providing an equivalent level of safety.
- (4) Construction work which is liable to create a risk to health or safety from an underground service, or from damage to or disturbance of it, shall not be carried out unless suitable and sufficient steps (including any steps required by this regulation) have been taken to prevent the risk, so far as is reasonably practicable.

# Prevention of drowning

- **25.**—(1) Where, in the course of construction work, a person is at risk of falling into water or other liquid with a risk of drowning, suitable and sufficient steps shall be taken to—
  - (a) prevent, so far as is reasonably practicable, the person falling;
  - (b) minimise the risk of drowning in the event of a fall; and
  - (c) ensure that suitable rescue equipment is provided, maintained and, when necessary, used so that a person may be promptly rescued in the event of a fall.
- (2) Suitable and sufficient steps shall be taken to ensure the safe transport of any person conveyed by water to or from a place of work.

(3) Any vessel used to convey any person by water to or from a place of work shall not be overcrowded or overloaded.

#### **Traffic routes**

- **26.**—(1) A construction site shall be organised in such a way that, so far as is reasonably practicable, pedestrians and vehicles can move without risks to health or safety.
- (2) Traffic routes shall be suitable for the persons or vehicles using them, sufficient in number, in suitable positions and of sufficient size.
- (3) A traffic route does not satisfy paragraph (2) unless suitable and sufficient steps are taken to ensure that—
  - (a) pedestrians or vehicles may use it without causing danger to the health or safety of persons near it;
  - (b) any door or gate for pedestrians which leads onto a traffic route is sufficiently separated from that traffic route to enable pedestrians to see any approaching vehicle or plant from a place of safety;
  - (c) there is sufficient separation between vehicles and pedestrians to ensure safety or, where this is not reasonably practicable—
    - (i) other means for the protection of pedestrians are provided; and
    - (ii) effective arrangements are used for warning any person liable to be crushed or trapped by any vehicle of its approach;
  - (d) any loading bay has at least one exit for the exclusive use of pedestrians; and
  - (e) where it is unsafe for pedestrians to use a gate intended primarily for vehicles, at least one door for pedestrians is provided in the immediate vicinity of the gate, is clearly marked and is kept free from obstruction.
  - (4) Each traffic route shall be—
    - (a) indicated by suitable signs where necessary for reasons of health or safety;
    - (b) regularly checked; and
    - (c) properly maintained.
- (5) No vehicle is to be driven on a traffic route unless, so far as is reasonably practicable, that traffic route is free from obstruction and permits sufficient clearance.

#### Vehicles

- **27.**—(1) Suitable and sufficient steps shall be taken to prevent or control the unintended movement of any vehicle.
- (2) Where a person may be endangered by the movement of a vehicle, suitable and sufficient steps to give warning to any person who is liable to be at risk from the movement of the vehicle shall be taken by either or both—
  - (a) the driver or operator of the vehicle; or
  - (b) where another person is directing the driver or operator because, due to the nature of the vehicle or task, the driver or operator does not have full visibility, the person providing directions.
- (3) A vehicle being used for the purposes of construction work shall, when being driven, operated or towed, be—
  - (a) driven, operated or towed in such a manner as is safe in the circumstances; and

- (b) loaded in such a way that it can be driven, operated or towed safely.
- (4) A person shall not ride, or be required or permitted to ride, on any vehicle being used for the purposes of construction work otherwise than in a safe place in that vehicle provided for that purpose.
- (5) A person shall not remain, or be required or permitted to remain, on any vehicle during the loading or unloading of any loose material unless a safe place of work is provided and maintained for that person.
- (6) Suitable and sufficient measures shall be taken to prevent a vehicle from falling into any excavation or pit, or into water, or overrunning the edge of any embankment or earthwork.

# Prevention of risk from fire, flooding or asphyxiation

- **28.** Suitable and sufficient steps shall be taken to prevent, so far as is reasonably practicable, the risk of injury to a person during the carrying out of construction work arising from—
  - (a) fire or explosion;
  - (b) flooding; or
  - (c) any substance liable to cause asphyxiation.

# **Emergency procedures**

- **29.**—(1) Where necessary in the interests of the health or safety of a person on a construction site, suitable and sufficient arrangements for dealing with any foreseeable emergency shall be made and, where necessary, implemented, and those arrangements shall include procedures for any necessary evacuation of the site or any part of it.
  - (2) In making arrangements under paragraph (1), account shall be taken of—
    - (a) the type of work for which the construction site is being used;
    - (b) the characteristics and size of the construction site and the number and location of places of work on that site;
    - (c) the work equipment being used;
    - (d) the number of persons likely to be present on the site at any one time; and
    - (e) the physical and chemical properties of any substances or materials on, or likely to be on, the site.
- (3) Where arrangements are made under paragraph (1), suitable and sufficient steps shall be taken to ensure that—
  - (a) each person to whom the arrangements extend is familiar with those arrangements; and
  - (b) the arrangements are tested by being put into effect at suitable intervals.

# **Emergency routes and exits**

- **30.**—(1) Where necessary in the interests of the health or safety of a person on a construction site, a sufficient number of suitable emergency routes and exits shall be provided to enable any person to reach a place of safety quickly in the event of danger.
- (2) The matters in regulation 29(2) shall be taken into account when making provision under paragraph (1).
  - (3) An emergency route or exit shall lead as directly as possible to an identified safe area.
- (4) An emergency route or exit and any traffic route giving access to it shall be kept clear and free from obstruction and, where necessary, provided with emergency lighting so that it may be used at any time.

(5) Each emergency route or exit shall be indicated by suitable signs.

## Fire detection and fire-fighting

- **31.**—(1) Where necessary in the interests of the health or safety of a person on a construction site, suitable and sufficient fire-fighting equipment and fire detection and alarm systems shall be provided and located in suitable places.
- (2) The matters in regulation 29(2) shall be taken into account when making provision under paragraph (1).
- (3) Fire-fighting equipment or fire detection and alarm systems shall be examined and tested at suitable intervals and properly maintained.
- (4) Fire-fighting equipment which is not designed to come into use automatically shall be easily accessible.
- (5) Each person at work on a construction site shall, so far as is reasonably practicable, be instructed in the correct use of fire-fighting equipment which it may be necessary for the person to use.
- (6) Where a work activity may give rise to a particular risk of fire, a person shall not carry out work unless suitably instructed.
  - (7) Fire-fighting equipment shall be indicated by suitable signs.

#### Fresh air

- **32.**—(1) Suitable and sufficient steps shall be taken to ensure, so far as is reasonably practicable, that each construction site, or approach to a construction site, has sufficient fresh or purified air to ensure that the site or approach is safe and without risks to health or safety.
- (2) Any plant used for the purpose of complying with paragraph (1) shall, where necessary for reasons of health or safety, include an effective device to give visible or audible warning of any failure of the plant.

#### **Temperature and weather protection**

- **33.**—(1) Suitable and sufficient steps shall be taken to ensure, so far as is reasonably practicable, that during working hours the temperature at a construction site that is indoors is reasonable having regard to the purpose for which that place is used.
- (2) Where necessary to ensure the health or safety of persons at work on a construction site that is outdoors, the construction site shall, so far as is reasonably practicable, be arranged to provide protection from adverse weather, having regard to—
  - (a) the purpose for which the site is used; and
  - (b) any protective clothing or work equipment provided for the use of any person at work there.

#### Lighting

- **34.**—(1) Each construction site and approach and traffic route to that site shall be provided with suitable and sufficient lighting, which shall be, so far as is reasonably practicable, by natural light.
- (2) The colour of any artificial lighting provided shall not adversely affect or change the perception of any sign or signal provided for the purposes of health or safety.
- (3) Suitable and sufficient secondary lighting shall be provided in any place where there would be a risk to the health or safety of a person in the event of the failure of primary artificial lighting.