

1977 No. 137

CONSUMER PROTECTION

Electrical Equipment (Safety) Regulations (Northern Ireland) 1977

Made 18th May 1977

Coming into operation in accordance with the provisions
of Regulation 1

To be laid before Parliament under paragraph 3(3) of
Schedule 1 to the Northern Ireland Act 1974

The Department of Commerce, after consultation with such persons and bodies of persons as appear to it to be requisite, in exercise of the powers conferred by sections 1 and 2(4) and (5) of, and paragraphs 2 and 3 of the Schedule to, the Consumer Protection Act (Northern Ireland) 1965(a) and now vested in it(b), and of every other power enabling it in that behalf, hereby makes the following Regulations:

Citation and commencement

1. These Regulations may be cited as the Electrical Equipment (Safety) Regulations (Northern Ireland) 1977 and shall come into operation on 1st July 1977 in relation to goods sold, or in the possession of any person for the purpose of being sold, by the manufacturer or importer into Northern Ireland of those goods and, subject to that, shall come into operation on 1st October 1977.

Interpretation

2.—(1) In these Regulations—

“the Act” means the Consumer Protection Act (Northern Ireland) 1965;

“British Standard 52” means the British Standard Specification for bayonet lamp-caps, lampholders and B.C. adaptors (lampholder plugs) for voltages not exceeding 250 volts BS 52: 1963, published on 30th November 1963, as amended by Amendment Slips Nos. 1, 2 and 3 published respectively, on 7th September 1964, 29th April 1966 and 28th December 1966;

“British Standard 546” means the British Standard Specification for two-pole and earthing-pin plugs, socket-outlets and socket-outlet adaptors for circuits up to 250 volts BS 546: 1950, published on 16th March 1950, as amended by Amendment Slips Nos. 1, 2, and 3 published, respectively, in December 1953, November 1961 and May 1969;

“British Standard 3456” followed by a reference to a numbered Section means Part 1 (General Requirements) of the British Standard Specification for testing and approval of household electrical appliances British Standard 3456: 1969 published on 31st December 1969, as applied and modified by the Section so numbered of Part 2 of the Specification, being that Section as published, and, where indicated, as amended on the date or dates shown in relation thereto;

(a) 1965 c. 14 (N.I.)

(b) S.R. & O. (N.I.) 1973 No. 504 Article 5(c) (II, p. 2992)

“British Standard 4647” means the British Standard Specification for lighting sets for Christmas trees and decorative purposes for indoor use BS 4647: 1970, published on 30th October 1970;

“British Standard 6500” means the British Standard Specification for insulated flexible cords BS 6500: 1969, published on 29th August 1969, as amended by Amendment Slips Nos. 1, 2 and 3 published, respectively, on 16th March 1972, 11th May 1973 and 17th April 1974;

“in use” in relation to any equipment means in use when properly assembled, installed and maintained and when being used with proper care having regard to the purpose for which the equipment is intended.

(2) For the purposes of these Regulations, where any British Standard or section thereof mentioned in these Regulations specifies relevant requirements by reference to another British Standard Specification that reference is to be construed as a reference to that other Specification as it has effect at the date on which these Regulations are made.

(3) Any reference in these Regulations to an electric shock is a reference to an electric shock of such severity as to be liable to cause personal injury.

Application

3.—(1) Subject to paragraphs (2) and (3), these Regulations shall apply to any electrical equipment (including any electrical apparatus, device or component part) designed or suitable for domestic use (whether indoors or out-of-doors) at a voltage (in the case of an alternating current) of not less than 50 volts nor more than 500 volts or (in the case of a direct current) of not less than 75 volts nor more than 750 volts.

(2) These Regulations shall not apply to any electric blanket within the meaning of the Electric Blankets (Safety) Regulations (Northern Ireland) 1972(c).

(3) These Regulations shall not apply to component parts intended for the replacement of parts in the course of repair of any equipment to which these Regulations apply which previously to the imposition of the relevant requirements contained in these Regulations has been disposed of by retail but nothing hereinbefore contained shall preclude the application of these Regulations to any component parts intended for the reconditioning of any such equipment for subsequent resale.

Basic insulation

4. Any part of any equipment to which these Regulations apply which is intended to be electrified shall be so insulated or isolated as not to be liable, when the equipment is in use, to electrify any part of the equipment not intended to be electrified, and the insulation or isolation required by this Regulation is hereinafter referred to as “basic insulation”.

Insulation and earthing of non-electrified parts

5.—(1) Subject to paragraphs (2) and (3), and Regulation 7, where any equipment to which these Regulations apply, other than filament, discharge and tubular fluorescent lights, has any parts not intended to be electrified and capable of being touched by hand, or with a finger, without something first being done to the equipment which requires the use of tools, then either—

(a) those parts shall be separated from parts intended to be electrified—

- (i) by sufficient additional or supplementary insulation (whether or not formed of the material of which the part not intended to be electrified is made) to ensure protection against an electric shock in the event of failure of basic insulation, or
- (ii) by metal parts with adequate provision for earthing; or
- (b) where the parts capable of being so touched are made of metal adequate provision for earthing those parts shall be incorporated.
- (2) Where any equipment referred to in this paragraph does not comply with paragraph (1) by reason only that it is fitted with cords which incorporate basic insulation only, those cords shall not—
- (a) in the case of equipment designed for the illumination of Christmas trees, be required to comply with paragraph (1) if the cords conform to the requirements of British Standard 4647 as to the minimum thickness of insulation and cross sectional area of the conductors;
- (b) in the case of equipment specified in column 1 of Table 1, be required to comply with paragraph (1) if the cords are flexible flat twin cords which conform to the requirements as to minimum thickness of insulation and cross sectional area of the conductors in the British Standard specified in column 2 of that Table in relation to that equipment;

TABLE 1

Column 1	Column 2
Shavers, hair clippers and similar appliances.	British Standard 3456: Section 2.5: 1970, published on 14th August 1970 as amended by Amendment Slip No. 1 published on 16th November 1973.
Clocks.	British Standard 3456: Section 2.16: 1971, published on 30th July 1971.
Hand-held massage appliances which have an input of 0.5 amperes or less at full load.	British Standard 3456: Section 2.18: 1970, published on 14th August 1970.
Hand-held appliances for skin and hair treatment which have an input of 3 amperes or less at full load.	British Standard 3456: Section 2.31: 1973, published on 8th October 1973.
Hand-held appliances in respect of which no particular requirements in British Standard 3456 have been published before the date of making of these Regulations and which have an input of 0.5 amperes or less at full load.	British Standard 6500.

- (c) in the case of equipment specified in column 1 of Table 2, if the cords are flexible flat twin cords which conform to the requirements as to minimum thickness of insulation and cross sectional area of conductors in the British Standard specified in column 2 of that Table in relation to that equipment, be required to comply with paragraph (1) until 1st

October 1977 if the equipment is sold, or in possession of any person for the purpose of being sold, by the manufacturer of the equipment or the importer into Northern Ireland of it, and until 1st October 1978 if it is sold, or in possession of any person for the purpose of being sold, by some person other than such manufacturer or importer;

TABLE 2

Column 1	Column 2
Electric heaters for baby feeding bottles.	British Standard 3456: Section 2.15: 1970, published on 19th March 1970.
Massage appliances (not intended to be hand-held).	British Standard 3456: Section 2.18: 1970, published on 14th August 1970.
Ventilating fans.	British Standard 3456: Section 2.29: 1971, published on 4th February 1971.
Appliances for skin and hair treatment, not intended to be hand-held and having an input of 3 amperes or less at full load.	British Standard 3456: Section 2.31: 1973, published on 8th October 1973.
Lighting fittings.	British Standard 6500.

(3) Where any equipment does not comply with paragraph (1) by reason only that it is fitted with rubber-insulated and braided cord which incorporates basic insulation only, that cord shall not be required to comply with paragraph (1) if the thickness of the basic insulation round each conductor conforms to that specified in Table 4 or Table 5 of British Standard 6500.

(4) Lighting fittings which fail to comply with paragraph (1) by reason only that the fittings incorporate a cover which can be moved without something first being done to the fittings which requires the use of tools and movement of which permits access to the basic insulation of parts intended to be electrified, shall be deemed to comply with this Regulation if, when the cover is in the closed position, every metal part (including the cover if of metal) which can be touched by hand or with a finger, is adequately earthed.

This paragraph shall not apply to portable lighting fittings—

- (a) which are sold, or in possession of any person for the purpose of being sold, by the manufacturer or importer into Northern Ireland after 1st October 1977;
- (b) which are sold, or in possession for the purpose of being sold, by any other person after 1st October 1978.

Prevention of access to electrified parts

6.—(1) Subject to paragraphs (2), (3), (4) and (5) and Regulation 7, where any part of equipment to which these Regulations apply which is intended to be electrified is capable of causing an electric shock to a person touching it, the equipment shall be so designed that that part is not capable of being touched by hand, or with a finger, without something first being done to the equipment which requires the use of tools.

(2) Paragraph (1) shall not have effect in relation to—

- (a) the heating element of an electric fire which is a heating appliance as defined in the Heating Appliances (Fireguards) Regulations (Northern Ireland) 1975(d);
- (b) the heating element of any other equipment intended to generate radiant heat except an electric fire which is so constructed as to require attachment to a ceiling, so however that where such a heating element is capable of causing an electric shock to a person touching it, the equipment shall be so designed as to avoid, so far as is consistent with the purpose for which it is to be used, the likelihood of the element being accidentally touched when the equipment is in use;
- (c) the electrode holder of an arc welding set;
- (d) ceiling roses, ceiling switches designed to be operated by a cord, fixed wiring junction boxes and “pear” switches;
- (e) lampholders.

(3) This Regulation shall not have effect in relation to 15 amp 3-pin plugs which comply with British Standard 546 until 1st April 1978 in the case of goods sold, or in possession of any person for the purpose of being sold, by the manufacturer or importer into Northern Ireland of those goods, and in any other case until 1st April 1979.

(4) This Regulation shall not have effect in relation to B.C. adaptors which comply with British Standard 52 until 1st January 1978, in the case of goods sold or in the possession of any person for the purpose of being sold, by the manufacturer or importer into Northern Ireland of those goods, and in any other case until 1st January 1979.

(5) This Regulation shall not have effect in relation to an electricity meter which fails to comply with paragraph (1) by reason only that the terminals cover can be removed without something first being done to the meter which requires the use of tools, if provision is made for the sealing of that cover in such manner that when the seal is in position the cover will not be able to be removed without breaking the seal.

Equipment in excess of 40kg in weight

7. In the case of equipment which has a mass exceeding 40kg and which when in use normally stands on the floor, a part shall be treated for the purposes of Regulations 5 and 6 as not being capable of being touched by hand, or with a finger, without something first being done which requires the use of tools, if that part can only be so touched from underneath the equipment and by tilting it.

Design of lampholders and pear switches

8.—(1) Lampholders and “pear” switches shall be so designed and constructed that—

- (a) parts intended to be electrified (other than parts of a lampholder intended to come into contact with the lamp) are not capable of being touched by hand or with a finger when the lampholder or switch is properly assembled and installed for use;
- (b) in the case of a switch, it does not, in the course of normal use, come apart inadvertently (whether by becoming unscrewed or otherwise);

(d) S.R. 1975 No. 310 (II, p. 1453)

(c) in the case of a lampholder, it is possible, when using a reasonable degree of force, to remove and replace a lamp (being a lamp suitable for use in that lampholder) or a shade ring without inadvertently removing those parts providing protection against contact with parts intended to be electrified.

(2) Paragraph (1) shall not have effect until 1st July 1977 in the case of goods sold, or in possession of any person for the purpose of being sold, by the manufacturer or importer into Northern Ireland of those goods, and in any other case until 1st October 1977.

(3)(a) Subject to paragraph (3)(b), a lampholder or the fitting in which it is incorporated shall be so designed and constructed that when a lamp is to any extent inserted in the lampholder no part of the lampholder or the lamp can be electrified so as to be capable of causing an electric shock to a person touching it, while it is capable of being touched by hand or with a finger.

(b) Paragraph (3)(a) shall not apply to—

- (i) Edison screw lampholders with an internal diameter exceeding 27mm;
- (ii) lampholders for double-ended filament discharge lamps for permanent installation out-of-doors;
- (iii) other lampholders for double-ended filament discharge lamps or lampholders for double-ended filament lamps, if the lampholder or the fitting in which it is incorporated bears a warning which is clearly visible when there is no lamp in the lampholder and is durable and is to the effect that the mains electricity supply should be disconnected before a lamp is inserted.

(4) Paragraph (3) shall, as respects lampholders for single-ended lamps, not have effect until 1st July 1977 in the case of goods sold, or in the possession of any person for the purpose of being sold, by the manufacturer or importer into Northern Ireland of those goods, and in any other case until 1st October 1977; and as respects lampholders for double-ended lamps, shall not have effect until 1st October 1977 in the case of goods sold or in possession as aforesaid and in any other case until 1st January 1978.

Flexible cord anchoring

9.—(1) Equipment having terminals to which is connected or intended to be connected a flexible cable or cord which may in use become subject to tension shall incorporate a device or be so designed and constructed that no such tension on the cable or cord is transmitted to the terminals.

(2) In the case of a 3-pin plug this Regulation shall be deemed to be complied with if it is complied with when the plug is used in conjunction with a cable or cord of a diameter of not less than 5mm and not more than the diameter of the largest cable or cord having a current rating equal to that of the plug.

(3) This Regulation shall not have effect—

- (a) as respects goods other than electric clocks until 1st July 1977 in the case of goods sold, or in possession of any person for the purpose of being sold, by the manufacturer or importer into Northern Ireland of those goods, and in any other case until 1st October 1977; and
- (b) as respects electric clocks, until 1st January 1978 in the case of goods sold or in possession as aforesaid, and in any other case until 1st July 1978.

Switches on appliances with accessible heating elements

10.—(1) In this Regulation “open heater” means equipment to which these Regulations apply being an electric fire, electric toaster or other equipment intended to generate radiant heat which incorporates a heating element which—

- (a) is intended to be electrified;
- (b) is capable of causing an electric shock to any person touching it; and
- (c) is capable, when the equipment is in use, of being touched by hand or with a finger or, in the case of an electric fire of which the heating element is protected by a guard, would be capable of being so touched if the guard were removed.

(2) Where a switch is incorporated in an open heater for the purpose of turning a heating element on or off (whether or not the switch has other functions), that switch shall be a double-pole switch; provided that where an open heater incorporates more than one heating element, controlled by separate switches, nothing in this paragraph shall require any switch, which cannot turn on a heating element until a double-pole switch has been operated, to be a double-pole switch.

(3) An open heater which is not of a portable kind but is intended to be installed so that it is permanently connected to the electricity supply shall incorporate a double-pole switch the operation of which shall be necessary before any heating element can be electrified.

Guarding of equipment

11. Any part of equipment to which these Regulations apply which is intended to be driven by mechanical power generated by the equipment, and which would otherwise be liable to cause personal injury when the equipment is in use, shall be enclosed or otherwise sufficiently guarded.

12.—(1) Subject to paragraphs (2) and (3) any part of equipment to which these Regulations apply which is liable when the equipment is in use to get so hot as to be liable to cause personal injury if touched, and which is liable to be touched when the equipment is in use, shall, if the nature of the equipment permits, be enclosed or otherwise sufficiently guarded.

(2) In the case of radiant electric fires this Regulation shall not have effect until 1st July 1977 in the case of goods sold, or in possession of any person for the purpose of being sold, by the manufacturer or importer into Northern Ireland of those goods, and in any other case until 1st October 1977; and after 1st July 1977 or, as the case may be, 1st October 1977 a radiant fire with a rated voltage of 200 volts or over shall not have to comply with this Regulation if the temperature rise above ambient temperature does not exceed 85°C when the mains supply is 240 volts.

(3) In the case of any part of an electric cooker which is more than 750mm above the level of the floor, this Regulation shall not have effect until 1st July 1978 in the case of goods sold, or in possession of any person for the purpose of being sold, by the manufacturer or importer into Northern Ireland of those goods, and in any other case, until 1st January 1979.

Prevention of emission of excessive heat, radiation or toxic gases

13. Equipment to which these Regulations apply shall be so designed and constructed that, when in use—

- (a) it does not generate excessive heat or emit any kind of radiation, in either case, so as to be dangerous;
- (b) it does not emit toxic gases to such an extent as to be dangerous or harmful to health.

Disclosure of information

14.—(1) Where it is necessary for the safe operation of any equipment to which these Regulations apply that the user should be aware of any particular characteristic of the equipment, the necessary information shall be given by markings on the equipment itself or, where this is not practicable, in a notice accompanying the equipment.

(2) It shall not be a sufficient compliance with this Regulation to give information in a language other than English.

Equipment already manufactured

15. Subsections (1) and (2) of section 2 of the Act (which prohibit sale and possession for sale of goods and component parts not complying with regulations) shall apply in relation to goods and, subject to Regulation 3(3), component parts manufactured before the imposition of these requirements notwithstanding anything in subsection (4) of that section (which exempts such goods and parts unless regulations otherwise provide).

Letting under hire-purchase agreement or on hire

16. Sections 2(1) to (3) of the Act (except subsection (3)(d) and (e)) (sale and possession for sale of goods and component parts not complying with regulations) shall, except as provided by section 2(6), apply in relation to goods to which these Regulations apply as if references to selling or to a sale included references to letting under a hire-purchase agreement or on hire, and the reference to a sale under a credit-sale agreement were a reference to a letting under a hire-purchase agreement.

Exemption

17. These Regulations shall not apply to equipment which is sold, or in possession for the purpose of being sold, to the Northern Ireland Electricity Service, established under Article 4(1) of the Electricity Supply (Northern Ireland) Order, 1972(e), and which is suitable for installation by the Service in connection with the provision of a supply of electricity by the Service to domestic premises.

Testing and enforcement

18.—(1) The Schedule to the Act shall have effect in relation to goods to which these Regulations apply.

(2) Any test of equipment to which these Regulations apply, being a test such as is referred to in paragraph 2 of the Schedule to the Act (which empowers a district council to purchase goods for the purpose of a test) shall be carried out, at the expense of the district council, by such person or body as may be authorised by the Department of Commerce to carry out such a test.

Sealed with the Official Seal of the Department of Commerce for Northern Ireland on 18th May 1977.

(L.S.)

(Sgd.) *W. T. McCrory*

Assistant Secretary

EXPLANATORY NOTE

(This note is not part of the regulations but is intended to indicate their general purport.)

These Regulations impose requirements relating to the safety of domestic electrical equipment and provide for certain exemptions. The requirements are concerned with:

- (a) insulation and earthing (Regulations 4 and 5);
- (b) accessibility of live parts (Regulation 6);
- (c) electrical safety of lampholders and "pear" switches (Regulation 8);
- (d) the prevention of tension in flexible cords being transmitted to the terminals of electrical equipment (Regulation 9);
- (e) the fitting of double-pole switches on appliances with accessible heating elements (Regulation 10);
- (f) the enclosure or guarding of equipment (Regulations 11 and 12);
- (g) the generation of excessive heat and the dangerous emission of radiation of any kind and the emission of toxic gases (Regulation 13);
- (h) the provision of information on safe operation (Regulation 14).

Under Regulation 16 lettings on hire and hire-purchase, and sales under credit-sale agreements of such equipment are subject to the requirements of the Regulations.

These requirements are consistent with the general safety provision specified in Article 2 and Annex I of Council Directive No. 73/23/EEC (O.J. No. L77, 26.3.1973, p. 29) adopted by the Council of the European Communities on 19th February 1973, on the harmonisation of the laws of Member States relating to electrical equipment designed for use within certain voltage limits.

The British Standards referred to in the Regulations may be obtained from the British Standards Institution, 2 Park Street, London W1Y 4AA.