Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Date: 31st December 2020

Item	Code / Table / Appendix	2015 Edition	2020 Edition
1	Code 1 (Page 10)	Compliance with the CoP should achieve compliance with the relevant aspects of the Wiring Regulations. However, those installations or parts of installation which comply with 2009 edition of this CoP is also deemed to have met the requirements of the Wiring Regulations provided that they: (a) are completed and connected to electricity supplies before 30 November 2017; and (b) comply with the electricity supplier's Supply Rules.	Compliance with the CoP should achieve compliance with the relevant aspects of the Wiring Regulations. However, those installations or parts of installation which comply with 2015 edition of this CoP is also deemed to have met the requirements of the Wiring Regulations provided that they: (a) are completed and connected to electricity supplies before 31 December 2021; and (b) comply with relevant electricity supplier's Supply Rules.
2	Code 2 (Page 12)	'circuit breaker' means a mechanical switching device capable of making, carrying and breaking currents under normal circuit conditions and also of making, carrying for a specified time, and breaking currents under specified abnormal circuit conditions, such as those of short circuit.	'circuit breaker' means a device capable of making, carrying and breaking normal load currents and also making and automatically breaking, under predetermined conditions, abnormal currents such as short-circuit currents.
3	Code 2	-	'electrical work' is interpreted in the Electricity Ordinance as work in relation to the installation, commissioning, inspection, testing, maintenance, modification or repair of a low voltage or high voltage fixed electrical installation and includes the supervision and certification of that work and the certification of design of that installation.
4	Code 2	-	'fixed electrical installation' is interpreted in the Electricity Ordinance as a low or high voltage electrical installation that is fixed to premises but does not include any electrical equipment that is supplied with electricity after passing through a socket of the installation at which the supply can be disconnected without the use of a tool.
5	Code 2	-	'generating facility' is interpreted in the Electricity Ordinance as an electrical installation used to produce electricity at low voltage or high voltage.
6	Code 2	-	'prefabricated wiring system' consists of wiring sections incorporating the means of inter-connection designed to allow sections to be connected together forming a wiring installation system.

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
7	Code 2	-	'residual current device (RCD)' [also known as 'residual current operated protective device]means a device or association of devices intended to cause the opening of contacts when the residual current attains a specified amperage under conditions specified by its manufacturer.
8	Code 2	-	'residual current operated circuit breaker with integral overcurrent protection (RCBO)' means a residual current operated switching device designed to perform the functions of protection against overload and/or short-circuit.
9	Code 2	-	'residual current operated circuit breaker without integral overcurrent protection (RCCB)' means a residual current operated switching device not designed to perform the functions of protection against overload and/or short-circuit.
10	Code 2	-	'selectivity' [also known as 'discrimination'] means coordination of the operating characteristic of two or more protective devices such that, on the incidence of an overcurrent or residual current within stated limits, the device intended to operate within these limits does so, while the other(s) does (do) not.
11	Code 2	-	'switchroom' means premises or an enclosed part of premises that contains electrical equipment for switching, controlling or regulating electricity at low voltage and above and that are large enough to admit the entrance of a person after the electrical equipment is in position. For further elaboration, these premises or rooms are used mainly for distribution of electricity, including main switchrooms, sub-main switchrooms, electrical rooms and meter rooms.
12	Code 4A(3)(a) (Page19)	(a) CB test certificates issued by national certification bodies participating in the IECEE (IEC System for Conformity Testing and Certification of Electrical Equipment) CB Scheme;	(a) CB test certificates issued by national certification bodies participating in the IECEE (IEC System for Conformity Assessment Schemes for Electrotechnical Equipment and Components) CB Scheme;

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
13	Code 4C(1) (Page 20)	(1) Interchangeability of socket outlets To ensure proper matching and interchangeability, socket outlets should be designed, constructed and manufactured to the requirements given in appendices 1, 2, 3 and 4. Socket outlets of standards mentioned in Table 4(1) which have identical physical dimensions and configurations as those shown in appendices 1, 2, 3 and 4 are also acceptable.	(1) Design The electrical installation shall be designed by a registered electrical worker of appropriate grade to provide the protection of person and property in accordance with the Wiring Regulations or the CoP and to ensure the proper functioning of the electrical installation for the intended use.
14	Code 4C(2) (Page 20)	(2) Protection (a) Electrical equipment should be mechanically and electrically protected so as to prevent danger from shock, burn, or other injury to person or damage to property or from fire of an electric origin.	(2) Construction and installation Good workmanship and suitable materials shall be used in the construction of electrical installations. The installation of electrical equipment should take account of manufacturers' recommendations. (3) Protection (a) Electrical equipment should be mechanically and electrically protected so as to prevent danger from shock, burn, or other injury to person or damage to property or from fire of an electric origin.
15	Code 4D(1)(a) (Page21)	(a) Each switch, fuse switch, switch fuse, busbar chamber, checkmeter and distribution board should be properly labelled on the front cover to indicate the circuit name or number, the rating of the fuse or circuit breaker, and the purpose of each circuit (e.g. lighting, socket outlet, pumps, lifts etc.).	(a) Each switch, fuse switch, switch-fuse, circuit breaker, busbar chamber, checkmeter and distribution board should be properly labelled on the front cover to indicate the circuit name or number, the rating of the fuse or circuit breaker, and the purpose of each circuit (e.g. lighting, socket outlet, pumps, lifts etc.).
16	Code 4E(g) (Page23)	(g) The minimum height of all clearance space(s) referred to in subparagraph (a) should not be less than 1 000 mm measured from the footing and those referred to in subparagraphs (b), (c) or (e) and (f), should not be less than 1 800 mm measured from the footing. Under normal operational conditions, where bare live parts are exposed, the minimum height of all such clearance spaces should not be less than 2 100 mm.	(g) The minimum height of all clearance space(s) referred to in subparagraph (a) should not be less than 1 000 mm measured from the finished floor level and those referred to in subparagraphs (b), (c) or (e) and (f), should not be less than 1 800 mm measured from the finished floor level. Under normal operational conditions, where bare live parts are exposed, the minimum height of all such clearance spaces should not be less than 2 100 mm.
17	Code 4F(2)(a) (Page 24)	(a) At least one exit of a switchroom/substation should open outwards and this emergency exit should be identified clearly.	(a) At least one exit of a main switchroom/substation should open outwards and this emergency exit should be identified clearly. The main switchroom is a switchroom where the point of electricity supply, (i) electrically nearest to the source end of the electricity supplier's electricity supply system at which a particular consumer's load, or any other loads are, or may be, connected or (ii) is taken directly from the consumer's transformer.

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
18	Code 4F(4) (Page 25)	(4) Prohibition of storage Switchroom/substation, other than the tools used for the operation and maintenance of the switchgear inside it, must not be used for storage purposes.	(4) Prohibition of storage Switchroom/substation, other than the tools and spare parts used for the operation and maintenance of the switchgear inside it, must not be used for storage purposes.
19	Code 4G(5) (Page 26)	(5) Use of ladder/ working platform A ladder made of wood or other non-conductive material should preferably be used on electrical work. Where electrical work cannot be safely done on or from the ground or from part of a permanent structure, suitable non-conductive working platforms (for details, please refer to the publications issued by the Labour Department) should be used.	(5) Work-at-height Where electrical work cannot be safely done on or from the ground or from part of a permanent structure, please refer to the requirements set out in the relevant publications of the Labour Department.
20	Code 4G(7)	-	(7) Precautions for work inside false ceiling (a) A task-specific risk assessment should be conducted by a competent person assigned by a registered electrical contractor or the owner of fixed electrical installation to identify all potential hazards associated with work inside false ceiling before the commencement of work. (b) A registered electrical contractor or the owner of fixed electrical installation should formulate appropriate method statements with safety procedures and safety measures for the work in accordance with the relevant risk assessments, and provide necessary safety information, instruction, training and supervision to the persons performing such work to avoid danger. (c) The scope of work and circuits of energized electrical installation at the place of work and in the vicinity of the work area should be identified. (d) Suitable personal protective equipment and testing equipment should be provided to and properly used by the persons performing the work. (e) The risk of inadvertent contact with live conductors/ live part of energized electrical installation at the place of work and in the vicinity (within 1.5 m) of the work area as well as its access path should be assessed and eliminated. Entering into or working on fragile false ceiling or similar unsafe places should be strictly

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td></td><td></td><td></td><td>prohibited. If access to and working on such places are required, suitable means of access/ means of support/ working platforms should be provided and properly used.
(f) The work area and its access path should be suitably lit.</td></tr>
<tr><td>21</td><td>Table 4(1)
(Page 34)</td><td>Table 4(1)
List of Standards and Organisations Recognised by the Director
<table><tr><td>Recognised National/ International Standards</td><td>(i) International Electrotechnical Commission Standards (IEC)
(ii) Guo Biao (GB)
(iii) British Standards (BS)
(iv) Standards approved by the International Commission on Rules for the Approval of Electrical Equipment (CEE)
(v) European Standards (EN) Harmonization Document (HD)
(vi) American National Standards (ANS)
(vii) Japanese Industrial Standards (JIS)
(viii) Australian Standards (AS)</td></tr><tr><td>Recognised National Organisations</td><td>(i) International Electrotechnical Commission
(ii) Standardization Administration of China
(iii) British Standards Institution
(iv) International Commission on Rules for the Approval of Electrical Equipment
(v) European Committee for Electrotechnical Standardization CENELEC
(vi) American National Standards Institute
(vii) Japanese Standards Association
(viii) Standards Australia</td></tr></table></td><td>Table 4(1)
List of Standards and Organisations Recognised by the Director
<table><tr><td>Recognised National/ International Standards</td><td>(i) International Electrotechnical Commission Standards (IEC)
(ii) Guo Biao (GB)
(iii) British Standards (BS)
(iv) European Standards (EN) Harmonization Document (HD)
(v) American National Standards (ANS)
(vi) Japanese Industrial Standards (JIS)
(vii) Australian Standards (AS)</td></tr><tr><td>Recognised National Organisations</td><td>(i) International Electrotechnical Commission
(ii) Standardization Administration of China
(iii) British Standards Institution
(iv) European Committee for Electrotechnical Standardization (CENELEC)
(v) American National Standards Institute
(vi) Japanese Standards Association
(vii) Standards Australia</td></tr></table></td></tr>
</table>

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
22	Code 6 Content Page (Page 40)	6D Final Circuits Using 5A or 15A Socket Outlets to Requirements Prescribed in Appendix 1 6E Final Circuits Using 13A Socket Outlets to Requirements Prescribed in Appendix 2 6F Final Circuits Using 5A, 15A or 30A Industrial Socket Outlets to Requirements Prescribed in Appendix 3 6G Final Circuits Using 16A Industrial Socket Outlets to Requirements Prescribed in Appendix 4 6H Final Circuits Using 32A, 63A or 125A Industrial Socket Outlets to Requirements Prescribed in Appendix 4	6D Final Circuits Using 5A or 15A Socket Outlets to BS 546 6E Final Circuits Using 13A Socket Outlets to BS 1363 6F Final Circuits Using Universal Serial Bus (USB) Outlets to IEC 60950-1 6G Final Circuits Using 16A Industrial Socket Outlets to IEC 60309 6H Final Circuits Using 32A, 63A or 125A Industrial Socket Outlets to IEC 60309
23	Code 6B(1)(d) (Page 41)	-	(d) Arc fault detection devices (AFDDs) complying with to IEC 62606 or equivalent are recommended as a means of providing additional protection against fire caused by arc faults in final circuits. The AFDD shall be placed at the origin of the circuit, if used. Examples where AFDDs can be used: (i) premises with sleeping accommodation (e.g. dwellings, hotels and guest house); (ii) premises for manufacturing or storing of readily combustibles substances , or substance liable to spontaneous combustion; (iii) premises where combustible materials are used as the main construction materials (e.g. wooden buildings); and (iv) premises with endangering or irreplaceable goods.
24	Code 6B (6)(c) (Page 42)	(c) For a polyphase circuit, the neutral conductor should have at least the full size of current carrying live conductors to cater for any imbalance or harmonic currents which may occur in normal services. For balanced three-phase systems where the total harmonic distortion due to third harmonic current or multiples of the third harmonic is greater than 15% of the fundamental line current, the rating factors given in Appendix 11 of BS 7671 should be taken into account.	(c) For a polyphase circuit, the neutral conductor should have at least the full size of current carrying live conductors to cater for any imbalance or harmonic currents which may occur in normal services. For balanced three-phase systems where the total harmonic distortion due to third harmonic current or multiples of the third harmonic is greater than 15% of the fundamental line current, the rating factors given in Table 6(1) should be taken into account.
25	Code 6D	6D Final Circuits Using 5A or 15A Socket Outlets to	6D Final Circuits Using 5A or 15A Socket Outlets to BS 546

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
	(Page 43)	Requirements Prescribed in Appendix 1	
26	Code 6E (Page 43)	6E Final Circuits Using 13A Socket Outlets to Requirements Prescribed in Appendix 2	6E Final Circuits Using 13A Socket Outlets to BS 1363
27	Code 6E (1)(b) (Page 43)	(b) The circuit, with spurs if any, may feed permanently connected equipment and an unlimited number of socket outlets in a limited floor area determined by Table 6(1). A typical circuit is illustrated in Figure 6(2).	(b) The circuit, with spurs if any, may feed permanently connected equipment and an unlimited number of socket outlets in a limited floor area determined by Table 6(2). A typical circuit is illustrated in Figure 6(2).
28	Code 6E(1)(c) (Page 43)	-	(c) For 13A socket outlets incorporated with USB circuits should comply with relevant requirements included in the 2016 or latest edition of BS 1363 Part 2.
29	Code 6F (Page 44)	6F Final Circuits Using 5A, 15A or 30A Industrial Socket Outlets to Requirements Prescribed in Appendix 3 (1) Socket outlets (a) These are protected type non-reversible socket outlets. Socket outlet without a key and a keyway is for use with non-fused plug and an exclusive radial final circuit must be used for the socket outlet. Socket outlet with a key and a keyway is for use with fused plug. (2) Accepted practice (a) Either radial or ring final circuits may be used. (b) The current demand of the equipment fed by the circuit will depend on the type of equipment and the operational requirements, and should not exceed the rating of the overcurrent protective device. In assessing the current demand, no diversity is allowed for permanently connected equipment. (c) The overcurrent protective device should have a rating not exceeding 32A. (d) The number of socket outlets can be unlimited. (e) The total current demand of socket outlets served by a fused spur should not exceed 16A. (f) A fused spur should be connected to a circuit through a fused connection unit with the rating of the fuse in the	6F Final Circuits Using Universal Serial Bus (USB) Outlets to IEC 60950-1 (a) Radial final circuits should be used. Circuit arrangement for final USB circuits is illustrated in Figure 6(4). (b) Overcurrent protection shall be provided on the primary side of each USB circuit either as integral parts of equipment or as part of the wiring installation. (c) If the USB circuits rely on the overcurrent protection as parts of the wiring installation, the installation instructions of the USB circuits shall be followed. (d) Apart from final circuits of 13A socket outlets, USB circuits should be electrically separated from other power circuits. Where USB circuits to be fed from the final circuits of 13A socket outlets, a fused spur should be connected to the circuit through a fused connection unit, with the rating of the fuse in accordance with manufacturer's recommendation, and not exceeding 13A in any event.

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
		unit not exceeding that of the cable forming the spur and, in any event, not exceeding 16A. (g) Non-fused spurs should not be used. (h) Equipment permanently connected to a circuit should be locally protected and controlled by a fuse of rating not exceeding 16A together with a switch, or by a miniature circuit breaker of rating not exceeding 16A. (i) Figure 6(4) illustrates such a circuit arrangement.	
30	Code 6G (Page 45)	6G Final Circuits Using 16A Industrial Socket Outlets to Requirements Prescribed in Appendix 4	6G Final Circuits Using 16A Industrial Socket Outlets to IEC 60309
31	Code 6H (Page 45)	6H Final Circuits Using 32A, 63A or 125A Industrial Socket Outlets to Requirements Prescribed in Appendix 4	6H Final Circuits Using 32A, 63A or 125A Industrial Socket Outlets to IEC 60309

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr>
<td>32</td>
<td>Table 6(1)
(Page 46)</td>
<td>
Table 6(1)
Final Circuits Using 13A Socket Outlets
Complying to Requirements Prescribed in Appendix 2
<table>
<tr><th>Type of Circuit</th><th>Rating of Overcurrent Protective Device (HBC fuse or Miniature Circuit Breaker)</th><th>Min. Copper Conductor Size of Rubber or PVC Insulated Cable for the Circuit and Non-fused Spur (Note)</th><th>Maximum Floor Area Served</th></tr>
<tr><td></td><td>(Ampere)</td><td>(mm²)</td><td>(m²)</td></tr>
<tr><td>A1 Ring</td><td>30 or 32</td><td>2.5</td><td>100</td></tr>
<tr><td>A2 Radial</td><td>30 or 32</td><td>4</td><td>50</td></tr>
<tr><td>A3 Radial</td><td>20</td><td>2.5</td><td>20</td></tr>
</table>
Note: 1. If cables of two or more circuits are bunched together or the ambient air temperature exceeds 30°C the size of conductor should be increased and appropriate correction factors (see Appendix 5) should be applied such that the conductor size should correspond to a current carrying capacity not less than:
(i) 20A for A1 or A3 circuits
(ii) 30A or 32A for A2 circuits
2. The conductor size of a fused spur should be determined from the total current demand served by that spur, which is limited to a maximum of 13A. When such spur serves socket outlets, the minimum conductor size is 1.5 mm² for rubber or PVC insulated cables, copper conductors.
</td>
<td>
Table 6(1)
Rating factors for triple harmonic currents in four-core and five-core cables
<table>
<tr><th rowspan="2">Third harmonic content of line current* %</th><th colspan="2">Rating Factor</th></tr>
<tr><th>Size selection is based on line current</th><th>Size selection is based on neutral current</th></tr>
<tr><td>0-15</td><td>1.0</td><td>-</td></tr>
<tr><td>>15-33</td><td>0.86</td><td>-</td></tr>
<tr><td>>33-45</td><td>-</td><td>0.86</td></tr>
<tr><td>>45</td><td>-</td><td>1.0</td></tr>
</table>
* The third harmonic content experessed as total harmonic distortion
</td>
</tr>
</table>

- The table is used <u>for reference only</u>. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td>33</td><td>Table 6(2)</td><td>-</td><td>

Table 6(2)

Final Circuits Using 13A Socket Outlets Complying to BS 1363

<table>
<tr><th>Type of Circuit</th><th>Rating of Overcurrent Protective Device (HBC fuse or Miniature Circuit Breaker)</th><th>Min. Copper Conductor Size of Rubber or PVC Insulated Cable for the Circuit and Non-fused Spur (Note)</th><th>Maximum Floor Area Served</th></tr>
<tr><td></td><td>(Ampere)</td><td>(mm^2)</td><td>(m^2)</td></tr>
<tr><td>A1 Ring</td><td>30 or 32</td><td>2.5</td><td>100</td></tr>
<tr><td>A2 Radial</td><td>30 or 32</td><td>4</td><td>50</td></tr>
<tr><td>A3 Radial</td><td>20</td><td>2.5</td><td>20</td></tr>
</table>

Note: 1. If cables of two or more circuits are bunched together or the ambient air temperature exceeds 30°C the size of conductor should be increased and appropriate rating factors (see Appendix 5) should be applied such that the conductor size should correspond to a current carrying capacity not less than:

(i) 20A for A1 or A3 circuits

(ii) 30A or 32A for A2 circuits

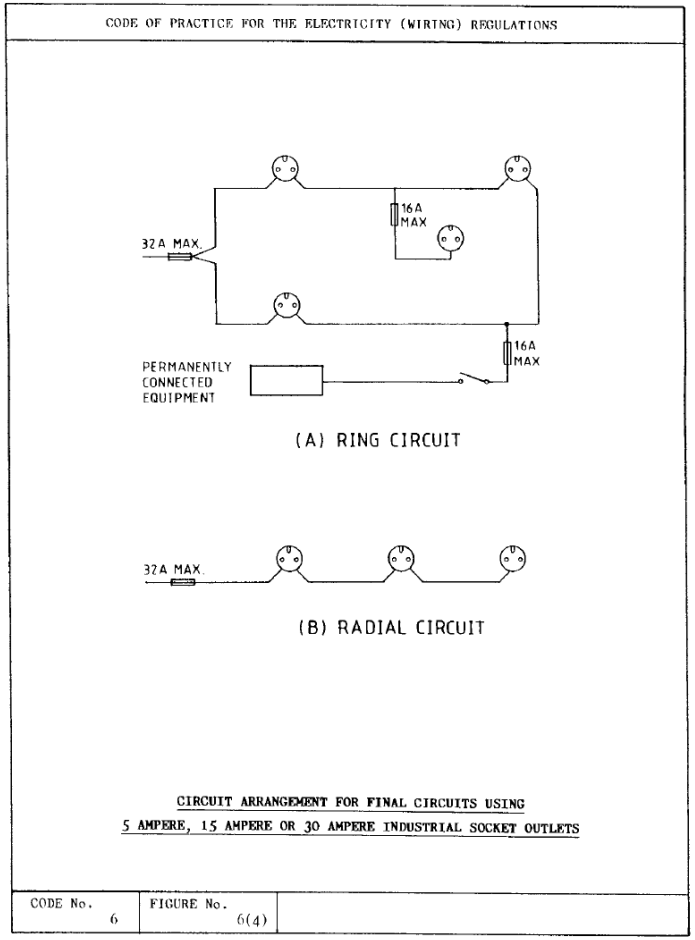
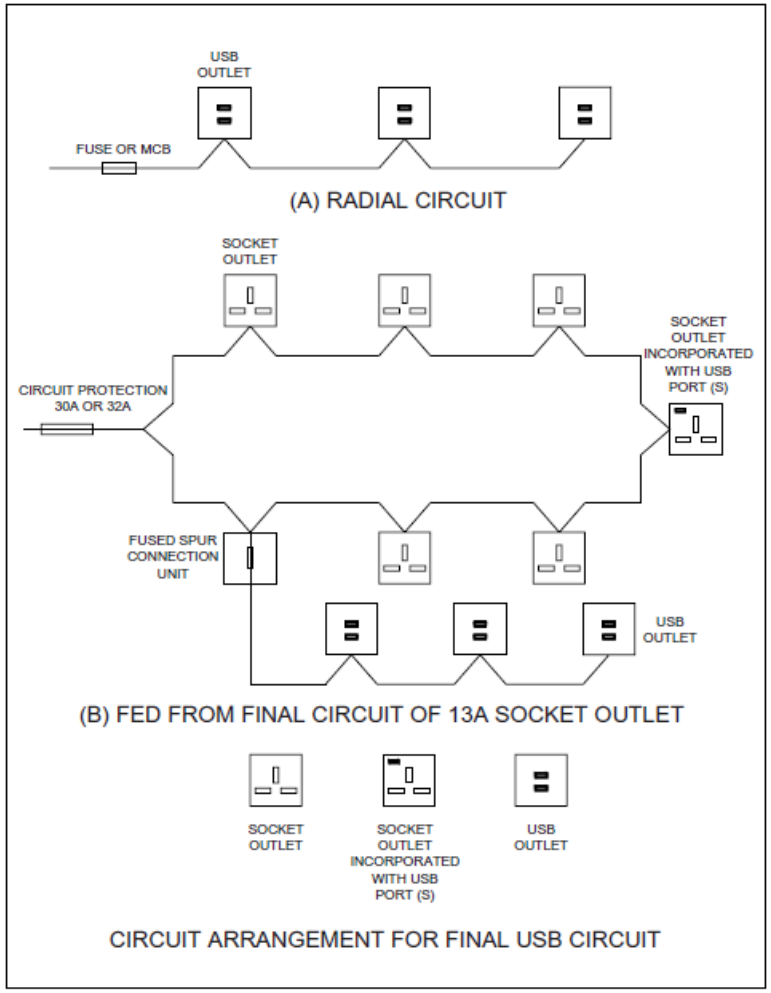
2. The conductor size of a fused spur should be determined from the total current demand served by that spur, which is limited to a maximum of 13A. When such spur serves socket outlets, the minimum conductor size is 1.5mm^2 for rubber or PVC insulated cables, copper conductors.

</td></tr>
</table>

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
34	Figure 6(4) (Page 50)		 CODE NO.6 FIGURE NO.6(4)
35	Code 7B (3)(b)(ii) & (iv) (Page 53)	(ii) lighting outlets should be assumed to demand the connected load with a minimum of 100W per lampholder;	(ii) lighting outlets should be assumed to demand the connected load with 60W per lampholder for incandescent lamps or the actual

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
			wattage of the lamp to be installed, whichever is the greater, except if the design of the luminaire associated with the lampholder only permits lamps of less than 60W to be inserted in any lampholder, in which case, the connected load of that lampholder is the wattage of the highest rated lamp that may be accommodated;
36	Code 7B (3)(b)(iv) (Page 53)	(iv) discharge lighting should be assumed to have a demand in voltamperes of the rated lamp wattage multiplied by not less than 1.8. This multiplier is based upon the assumption that the circuit is corrected to a power factor of not less than 0.85 lagging, and takes into account control gear losses and harmonic currents; and	(iv) fluorescent and other discharge lamps (e.g. low or high pressure sodium lamp, metal halide lamps, etc) should be assumed to have a demand in volt-amperes of the rated lamp wattage multiplied by a factor, which takes into account control gear losses and harmonic currents. In the absence of more precise information from manufacturer, a factor of not less than 1.8 could be adopted; and
37	Code 8 Content Page	8A Provision of Isolation and Switching (1) General installation (2) Appliance, equipment or luminaire (3) Unguarded moving parts (4) Electric motors (5) Switching off for mechanical maintenance (6) Emergency switching (7) 11kV and 22kV Main Switch	8A Provision of Isolation and Switching (1) General installation (2) Appliance, equipment or luminaire (3) Unguarded moving parts (4) Electric motors (5) Switching off for mechanical maintenance (6) Emergency switching (7) 11kV and 22kV Main Switch (8) Direct Current (DC) System
38	Code 8A (8)	-	(8) Direct Current (DC) System (a) All Conductors of a DC circuit shall be capable of being isolated by a device for isolation except the case in subparagraph (b). (b) In the case of a DC circuit having one conductor connected either to earth or to a protective earthing conductor, that conductor need not be isolated or switched.
39	Code 8B (2)(d)(vi) (Page 61)	(vi) circuit breakers, including miniature circuit breakers (MCB), moulded case circuit breakers (MCCB) and residual current circuit breakers (RCCB).	(vi) circuit breakers, including miniature circuit breakers (MCB), moulded case circuit breakers (MCCB), residual current operated circuit breaker with integral overcurrent protection (RCBO) and residual current circuit breakers without integral overcurrent protection (RCCB).

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td>40</td><td>Code 8B (3)(a)
(Page 61)</td><td>(iii) be designed and/or installed in such a way to prevent inadvertent or unintentional switching on;</td><td>(iii) be designed and installed in such a way to prevent inadvertent or unintentional switching on;</td></tr>
<tr><td>41</td><td>Code 9A(3)(d)
(Page 65)</td><td>(d) Miniature Circuit Breakers (MCB) and Moulded Case Circuit Breakers (MCCB) should be equipped with lockable function such that these devices can be locked off and only be able to be unlocked by the use of keys or tools used to lock off these devices. These keys or tools should be kept by the person who locks these devices.</td><td>(d) Fuse Switch, Switch-fuse, Residual Current Operated Circuit Breakers with Integral Overcurrent Protection (RCBO), Miniature Circuit Breakers (MCB) and Moulded Case Circuit Breakers (MCCB) should be equipped with lockable function such that these devices can be locked off and only be able to be unlocked by the use of keys or tools used to lock off these devices. These keys or tools should be under the control of the responsible person.</td></tr>
<tr><td>42</td><td>Table 9(2)
(Page 70)</td><td>Table 9(2)
Minimum Breaking Capacities of Overcurrent Protective Devices
<table>
<tr><th>Types of supply to which the protective devices are connected</th><th>Current rating of back-up fuses (if provided) to BS 88 or equivalent</th><th>Minimum three phase breaking capacities of the protective devices</th></tr>
<tr><td rowspan="3">(i) Supply directly taken from the transformer within the premises in which the installation is situated.</td><td>no back-up fuse fitted</td><td>40 kA</td></tr>
<tr><td>not exceeding 160A</td><td>4.5 kA (with back-up fuses)</td></tr>
<tr><td>exceeding 160A but not exceeding 400A</td><td>23 kA (with back-up fuses)</td></tr>
<tr><td rowspan="3">(ii) Supply tapped from busbar rising mains (for cable rising mains, the breaking capacities may be smaller in value depending on the design)</td><td>not exceeding 160A</td><td>4.5 kA (with back-up fuses)</td></tr>
<tr><td>exceeding 160A but not exceeding 400A</td><td>23 kA (with back-up fuses)</td></tr>
<tr><td>no back-up fuse fitted</td><td>not less than the prospective fault current shown in Table 9(3)</td></tr>
<tr><td rowspan="2">(iii) Supply taken from electricity supplier s service box or overhead line</td><td>not exceeding 160A</td><td>4.5 kA (with back-up fuses)</td></tr>
<tr><td>exceeding 160A but not exceeding 400A</td><td>18 kA (with back-up fuses)</td></tr>
</table>
(Note: The single phase breaking capacity should be assessed by registered electrical workers of the appropriate grade)</td><td>Table 9(2)
Minimum Breaking Capacities of Overcurrent Protective Devices
<table>
<tr><th>Types of supply to which the protective devices are connected</th><th>Current rating of back-up fuses (if provided) to BS 88 or equivalent</th><th>Minimum three phase breaking capacities of the protective devices</th></tr>
<tr><td rowspan="2">(i) Supply directly taken from the transformer within the premises in which the installation is situated.</td><td>no back-up fuse fitted</td><td>40 kA</td></tr>
<tr><td>not exceeding 160A</td><td>4.5 kA (with back-up fuses)</td></tr>
<tr><td></td><td>exceeding 160A but not exceeding 400A</td><td>23 kA (with back-up fuses)</td></tr>
<tr><td rowspan="3">(ii) Supply tapped from busbar rising mains (for cable rising mains, the breaking capacities may be smaller in value depending on the design)</td><td>not exceeding 160A</td><td>4.5 kA (with back-up fuses)</td></tr>
<tr><td>exceeding 160A but not exceeding 400A</td><td>23 kA (with back-up fuses)</td></tr>
<tr><td>no back-up fuse fitted</td><td>advice from manufacturer should be sought</td></tr>
<tr><td rowspan="2">(iii) Supply taken from electricity supplier's service box or overhead line</td><td>not exceeding 160A</td><td>4.5 kA (with back-up fuses)</td></tr>
<tr><td>exceeding 160A but not exceeding 400A</td><td>18 kA (with back-up fuses)</td></tr>
</table>
(Note: The single phase breaking capacity should be assessed by registered electrical workers of the appropriate grade)</td></tr>
</table>

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr>
<td>43</td>
<td>Table 9(3)
(Page 71)</td>
<td>
Table 9(3)
Approximate Prospective Fault Current at
Tap-off Positions of Busbar Rising Mains Installation in
kA (kilo-Amperes)
<table>
<tr><th rowspan="2">Length of Busbars (metres)</th><th colspan="4">Rating of Rising Mains</th></tr>
<tr><th>200–300A</th><th>400–500A</th><th>600–800A</th><th>1000–2500A</th></tr>
<tr><td></td><td>kA</td><td>kA</td><td>kA</td><td>kA</td></tr>
<tr><td>10</td><td>24</td><td>26</td><td>30</td><td>33</td></tr>
<tr><td>13</td><td>22</td><td>25</td><td>30</td><td>33</td></tr>
<tr><td>16</td><td>21</td><td>24</td><td>30</td><td>33</td></tr>
<tr><td>19</td><td>20</td><td>23</td><td>28</td><td>33</td></tr>
<tr><td>22</td><td>18</td><td>22</td><td>28</td><td>33</td></tr>
<tr><td>25</td><td>18</td><td>22</td><td>28</td><td>33</td></tr>
<tr><td>28</td><td>17</td><td>21</td><td>26</td><td>30</td></tr>
<tr><td>31</td><td>16</td><td>20</td><td>26</td><td>30</td></tr>
<tr><td>34</td><td>15</td><td>20</td><td>26</td><td>30</td></tr>
<tr><td>37</td><td>15</td><td>19</td><td>26</td><td>30</td></tr>
<tr><td>40</td><td>14</td><td>18</td><td>24</td><td>30</td></tr>
<tr><td>43</td><td>13</td><td>18</td><td>24</td><td>30</td></tr>
<tr><td>46</td><td>13</td><td>17</td><td>24</td><td>30</td></tr>
<tr><td>49</td><td>12</td><td>17</td><td>24</td><td>30</td></tr>
<tr><td>52</td><td>12</td><td>17</td><td>24</td><td>28</td></tr>
<tr><td>55</td><td>11</td><td>16</td><td>24</td><td>28</td></tr>
<tr><td>58</td><td>11</td><td>16</td><td>22</td><td>28</td></tr>
<tr><td>61</td><td>11</td><td>15</td><td>22</td><td>28</td></tr>
<tr><td>64</td><td>10</td><td>15</td><td>22</td><td>28</td></tr>
<tr><td>67</td><td>10</td><td>15</td><td>22</td><td>28</td></tr>
<tr><td>70</td><td>10</td><td>14</td><td>22</td><td>28</td></tr>
<tr><td>73</td><td>9</td><td>14</td><td>22</td><td>28</td></tr>
<tr><td>76</td><td>9</td><td>14</td><td>20</td><td>26</td></tr>
<tr><td>79</td><td>9</td><td>13</td><td>20</td><td>26</td></tr>
<tr><td>82</td><td>9</td><td>13</td><td>20</td><td>26</td></tr>
<tr><td>85</td><td>8</td><td>13</td><td>20</td><td>26</td></tr>
<tr><td>88</td><td>8</td><td>13</td><td>20</td><td>26</td></tr>
<tr><td>91</td><td>8</td><td>12</td><td>20</td><td>26</td></tr>
<tr><td>94</td><td>8</td><td>12</td><td>20</td><td>26</td></tr>
<tr><td>97</td><td>7</td><td>12</td><td>20</td><td>26</td></tr>
</table>
(Note : The information and values given in this Table are intended for general guidance for 220/380V, prospective fault current of 40kA system only as the prospective fault current will vary for different kinds of busbars)
</td>
<td>
Table 9(3)

Classification of MCB to IEC 60898 according to the instantaneous tripping current
<table>
<tr><th>Type</th><th>Instantaneously Tripping Current</th></tr>
<tr><td>B</td><td>$3\ I_n < I \leq 5\ I_n$</td></tr>
<tr><td>C</td><td>$5\ I_n < I \leq 10\ I_n$</td></tr>
<tr><td>D</td><td>$10\ I_n < I \leq 20\ I_n$</td></tr>
</table>
Note: The information above is extracted from IEC 60898-1 ed.1.2 “Copyright©2003 IEC Geneva, Switzerland.www.iec.ch”.
</td>
</tr>
</table>

- The table is used <u>for reference only</u>. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td>44</td><td>Table 9(4)
(Page 71)</td><td>Table 9(4)
Classification of MCB to IEC 60898 according to the instantaneous tripping current
<table><tr><th>Type</th><th>Instantaneously Tripping Current</th></tr><tr><td>B</td><td>$3\ I_n < I \leq 5\ I_n$</td></tr><tr><td>C</td><td>$5\ I_n < I \leq 10\ I_n$</td></tr><tr><td>D</td><td>$10\ I_n < I \leq 20\ I_n$</td></tr></table>Note: The information above is extracted from IEC 60898-1 ed.1.2 “Copyright©2003 IEC Geneva, Switzerland.www.iec.ch”.</td><td>Deleted</td></tr>
<tr><td>45</td><td>Code 11C(2)(b)
(Page 78)</td><td>(b) Subject to subparagraph (a) above, the cross-sectional area of a protective conductor, other than an equipotential or supplementarybonding conductor and not forming part of a twin or multicorecable, that are selected in accordance with the appropriate Tables 11(2), 11(3), 11(4), 11(5), 11(6) and 11(7) are considered acceptable.Alternatively, the cross-sectional area of the protective conductorcan be calculated using the formula given in regulation 543.1.3 ofBS 7671.</td><td>(b) Subject to subparagraph (a) above, the cross-sectional area of a protective conductor, other than an equipotential or supplementary bonding conductor and not forming part of a twin or multicore cable, that is selected in accordance with Table 11(2) is considered acceptable. Alternatively, the cross-sectional area of the protective conductor can be calculated using the formula given in regulation 543.1.3 of BS 7671.</td></tr>
<tr><td>46</td><td>Code 11D(1)
(Page 78)</td><td>Unless other effective precautions are taken to prevent danger, such as the use of double insulated equipment or the use of isolating transformer to BSEN 61558 or equivalent, all exposed conductive parts of equipment (other than live parts) should be connected by means of circuit protective conductors (CPC) to the main earthing terminal of the installation and the terminal should be connected to earth electrode(s) via earthing conductor(s).</td><td>Unless other effective precautions are taken to prevent danger, such as the use of double insulated equipment or the use of isolating transformer to IEC 61558 or equivalent, all exposed conductive parts of equipment (other than live parts) should be connected by means of circuit protective conductors (CPC) to the main earthing terminal of the installation and the terminal should be connected to earth electrode(s) via earthing conductor(s).</td></tr>
<tr><td>47</td><td>Code 11F(e)
(Page 81)</td><td>-</td><td>(e) For metallic pipe brackets or small metallic parts such as fixing screws for non-metallic accessories at external wall of building, its supplementary bonding to simultaneously accessible exposed conductive parts or extraneous conductive parts may not be necessary if the automatic disconnection of the relevant protective devices could be achieved in the time required by BS 7671.</td></tr>
</table>

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
48	Code 11I(a)(i) (Page 83)	(i) in compliance with Table 11(10) to achieve automatic disconnectionwithin 0.2 second by the protective device in the event of an earth fault are acceptable;	(i) in compliance with **Tables 11(8), 11(9) and 11(10)** to achieve automatic disconnection within 0.2 second by the protective device in the event of an earth fault are acceptable;
49	Code 11J (1)(b)(iii) (Page 83)	-	**(iii) for an electrical installation in premises under the "List of Recognized Villages under the New Territories Small House Policy" (for details, please refer to the publications issued by the Lands Department)**
50	Code 11J (2)(c)(ii) (Page 83)	(ii) Where a residual current device for fault protection is used with, but separately from, overcurrent protective devices, the residual current device should be capable of withstanding, without damage, the thermal and mechanical stresses of a fault occurring on the load side of the circuit which it protects. Values of prospective fault current in a typical installation are given in Table 9(3).	(ii) Where a residual current device for fault protection is used with, but separately from, overcurrent protective devices, the residual current device should be capable of withstanding, without damage, the thermal and mechanical stresses of a fault occurring on the load side of the circuit which it protects.
51	Code 11J (2)(d)(v) (Page 84)	-	**(v) be appropriate type, taking into account the characteristics of the expected residual current in the circuit under protection.**

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td>52</td><td>Table 11(2)(a)
(Page 85)</td><td>

Table 11(2)

(a) Minimum Cross-sectional Area of Protective Conductor in Relation to the Cross-sectional Area of Associated Phase Conductor

<table>
<tr><th rowspan="2">Cross-sectional Area of Phase Conductor (S)</th><th colspan="2">Minimum Cross-sectional Area of the Corresponding Protective Conductor</th></tr>
<tr><th>If the Protective Conductor is of the Same Material as the Phase Conductor</th><th>If the Protective Conductor is not the Same Material as the Phase Conductor</th></tr>
<tr><td>mm^2</td><td>mm^2</td><td>mm^2</td></tr>
<tr><td>$S \leq 16$</td><td>S</td><td>$\frac{k_1 S}{k_2}$</td></tr>
<tr><td>$16 < S \leq 35$</td><td>16</td><td>$\frac{k_1 16}{k_2}$</td></tr>
<tr><td>$S > 35$</td><td>$\frac{S}{2}$</td><td>$\frac{k_1 S}{k_2 2}$</td></tr>
</table>

Note: For values of k_1 and k_2, please refer to tables 11(2)*(b)*, *(c)*, *(d)*, *(e)* and *(f)*.

</td><td>

Table 11(2)

(a) Minimum Cross-sectional Area of Protective Conductor in Relation to the Cross-sectional Area of Associated Phase Conductor

<table>
<tr><th rowspan="2">Cross-sectional Area of Phase Conductor (S)</th><th colspan="2">Minimum Cross-sectional Area of the Corresponding Protective Conductor</th></tr>
<tr><th>If the Protective Conductor is of the Same Material as the Phase Conductor</th><th>If the Protective Conductor is not the Same Material as the Phase Conductor</th></tr>
<tr><td>mm^2</td><td>mm^2</td><td>mm^2</td></tr>
<tr><td>$S \leq 16$</td><td>S</td><td>$\frac{k_1 S}{k_2}$</td></tr>
<tr><td>$16 < S \leq 35$</td><td>16</td><td>$\frac{k_1 16}{k_2}$</td></tr>
<tr><td>$S > 35$</td><td>$\frac{S}{2}$</td><td>$\frac{k_1 S}{k_2 2}$</td></tr>
</table>

Note: k_1 is the value of k for the phase conductor, please refer to table 11(2)(g).

k_2 is the value of k for the protective conductor, please refer to table 11(2)(b), (c), (d), (e) and (f)

</td></tr>
<tr><td>53</td><td>Table 11(2)(d)
(Page 86)</td><td>

(d) Values of k for protective conductor as a sheath or armour of a cable

<table>
<tr><th rowspan="2">Material of conductor</th><th colspan="3">Insulation material</th></tr>
<tr><th>70°C thermoplastic</th><th>90°C thermoplastic</th><th>90°C thermosetting</th></tr>
<tr><td>Aluminium</td><td>93</td><td>85</td><td>85</td></tr>
<tr><td>Steel</td><td>51</td><td>46</td><td>46</td></tr>
<tr><td>Lead</td><td>26</td><td>23</td><td>23</td></tr>
<tr><td>Assumed initial temperature</td><td>60°C</td><td>80°C</td><td>80°C</td></tr>
<tr><td>Final temperature</td><td>200°C</td><td>200°C</td><td>200°C</td></tr>
</table>

</td><td>

(d) Values of k for the sheath or armour of a cable as the protective conductor

<table>
<tr><th rowspan="2">Material of conductor</th><th colspan="3">Insulation material</th></tr>
<tr><th>70°C thermoplastic</th><th>90°C thermoplastic</th><th>90°C thermosetting</th></tr>
<tr><td>Aluminium</td><td>93</td><td>85</td><td>85</td></tr>
<tr><td>Steel</td><td>51</td><td>46</td><td>46</td></tr>
<tr><td>Lead</td><td>26</td><td>23</td><td>23</td></tr>
<tr><td>Assumed initial temperature</td><td>60°C</td><td>80°C</td><td>80°C</td></tr>
<tr><td>Final temperature</td><td>200°C</td><td>200°C</td><td>200°C</td></tr>
</table>

</td></tr>
</table>

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td>54</td><td>Table 11(2)(f)
(Page 87)</td><td>

(f) Values of k for bare conductor where there is no risk of damage to any neighbouring material by the temperatures indicated

<table>
<tr><th rowspan="2">Material of conductor</th><th colspan="3">Conditions</th></tr>
<tr><th>Visible and in restricted areas</th><th>Normal conditions</th><th>Fire risk</th></tr>
<tr><td>Copper</td><td>228</td><td>159</td><td>138</td></tr>
<tr><td>Aluminium</td><td>125</td><td>105</td><td>91</td></tr>
<tr><td>Steel</td><td>82</td><td>58</td><td>50</td></tr>
<tr><td>Assumed initial temperature</td><td>30°C</td><td>30°C</td><td>30°C</td></tr>
<tr><td>Final temperature</td><td></td><td></td><td></td></tr>
<tr><td>Copper conductors</td><td>500°C</td><td>200°C</td><td>150°C</td></tr>
<tr><td>Aluminium conductors</td><td>300°C</td><td>200°C</td><td>150°C</td></tr>
<tr><td>Steel conductors</td><td>500°C</td><td>200°C</td><td>150°C</td></tr>
</table>

</td><td>

(f) Values of k for bare conductor where there is no risk of damage to any neighbouring material by the temperatures indicated

<table>
<tr><th rowspan="2">Material of conductor</th><th colspan="3">Conditions</th></tr>
<tr><th>Visible and in restricted areas</th><th>Normal conditions</th><th>Fire risk</th></tr>
<tr><td>Copper
Aluminium
Steel</td><td>228
125
82</td><td>159
105
58</td><td>138
91
50</td></tr>
<tr><td>Assumed initial temperature
Final temperature
Copper conductors
Aluminium conductors
Steel conductors</td><td>30°C

500°C
300°C
500°C</td><td>30°C

200°C
200°C
200°C</td><td>30°C

150°C
150°C
150°C</td></tr>
</table>

Note: The temperature indicated are valid only where they do not impair the quality of the connections.

</td></tr>
<tr><td>55</td><td>Table 11(2)(g)</td><td>-</td><td>

(g) Values of k for the phase conductor according to the materials of both conductor and insulation

<table>
<tr><th rowspan="3">Material of conductor</th><th colspan="6">Insulation material</th></tr>
<tr><th colspan="2">Thermoplastic</th><th colspan="2">Thermosetting</th><th colspan="2">Mineral insulated</th></tr>
<tr><th>70°C</th><th>90°C</th><th>60°C</th><th>90°C</th><th>Thermoplastic sheath</th><th>Bare (unsheathed)</th></tr>
<tr><td>Copper
Aluminium
Copper with tin soldered joints</td><td>115/103*
76/68*
115/103*</td><td>100/86*
66/57*
100/86*</td><td>141
93
122</td><td>143
94
100</td><td>115</td><td>135/115#</td></tr>
<tr><td>Assumed initial temperature
Final temperature</td><td>70°C
160°C/ 140°C*</td><td>90°C
160°C/ 140°C</td><td>60°C
200°C</td><td>90°C
250°C</td><td>70°C
160°C</td><td>105°C
250°C</td></tr>
</table>

* Above 300mm^2

Value for bare cables exposed to touch

</td></tr>
</table>

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td>56</td><td>Table 11(3)</td><td>

Table 11(3)

Minimum Cross-sectional Area of Protective Conductor for Circuits Protected by HBC Fuses to BS88 Part 2

<table>
<tr><td colspan="2">Fuse Rating (Amp)</td><td>6</td><td>10</td><td>16</td><td>20</td><td>32</td><td>50</td><td>63</td><td>80</td><td>100</td><td>160</td><td>200</td><td>250</td><td>315</td><td>400</td></tr>
<tr><td rowspan="2">Minimum cross-sectional area (sq. mm) of protective conductor for 5 sec. (not including within 0.4 sec.) disconnection</td><td>Copper</td><td>1</td><td>1</td><td>1</td><td>1.5</td><td>2.5</td><td>4</td><td>6</td><td>10</td><td>10</td><td>16</td><td>25</td><td>25</td><td>35</td><td>50</td></tr>
<tr><td>Aluminium</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>25</td><td>35</td><td>50</td><td>50</td><td>70</td></tr>
<tr><td>Minimum cross-sectional area (sq. mm) of protective conductor for 0.4 sec. disconnection</td><td>Copper</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>2.5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

Note: The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.

</td><td>Deleted</td></tr>
<tr><td>57</td><td>Table 11(4)</td><td>

Table 11(4)

Minimum Cross-sectional Area of Protective Conductor for Circuits Protected by HBC Fuses to BS1361

<table>
<tr><td colspan="2">Fuse Rating (Amp)</td><td>5</td><td>15</td><td>20</td><td>30</td><td>45</td><td>60</td><td>80</td><td>100</td></tr>
<tr><td rowspan="2">Minimum cross-sectional area (sq. mm) of protective conductor for 5 sec. (not including within 0.4 sec.) disconnection</td><td>Copper</td><td>1</td><td>1</td><td>1.5</td><td>2.5</td><td>4</td><td>10</td><td>10</td><td>16</td></tr>
<tr><td>Aluminium</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>25</td></tr>
<tr><td>Minimum cross-sectional area (sq. mm) of protective conductor for 0.4 sec. disconnection</td><td>Copper</td><td>1</td><td>1</td><td>1</td><td>1</td><td>2.5</td><td></td><td></td><td></td></tr>
</table>

Note: The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.

</td><td>Deleted</td></tr>
</table>

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td>58</td><td>Table 11(5)</td><td>

Table 11(5)

Minimum Cross-sectional Area of Protective Conductor for Circuits Protected by Miniature Circuit Breaker Type 1 & 2 to BS 3871 or Equivalent

<table>
<tr><th rowspan="2">Earth Fault Loop Impedance Zs (ohm)</th><th colspan="2">Minimum Cross-sectional Area of Protective Conductor (mm²) for 5 Sec. and 0.4 Sec. Disconnection</th></tr>
<tr><th>Copper</th><th>Aluminium</th></tr>
<tr><td>0.2 ≤Zs</td><td>1</td><td>16</td></tr>
<tr><td>0.13≤Zs<0.2</td><td>1.5</td><td>16</td></tr>
<tr><td>0.08≤Zs<0.13</td><td>2.5</td><td>16</td></tr>
<tr><td>0.05≤Zs<0.08</td><td>4.0</td><td>16</td></tr>
<tr><td>0.03≤Zs<0.05</td><td>6.0</td><td>16</td></tr>
<tr><td>0.02≤Zs<0.03</td><td>10</td><td>16</td></tr>
<tr><td>Zs<0.02</td><td>16</td><td>25</td></tr>
</table>

Note: The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.

</td><td>Deleted</td></tr>
<tr><td>59</td><td>Table 11(6)</td><td>

Table 11(6)

Minimum Cross-sectional Area of Protective Conductor for Circuit Protected by Miniature Circuit Breaker (MCB) Type 3, Type B & Type C to IEC 60898 or Equivalent

<table>
<tr><td colspan="2">MCB Rating (Amp)</td><td>5</td><td>10</td><td>15</td><td>20</td><td>30</td><td>50</td><td>60</td><td>80</td><td>100</td></tr>
<tr><td rowspan="2">Minimum cross-sectional area (sq. mm) of protective conductor for 5 sec. (not including within 0.4 sec.) disconnection</td><td>Copper</td><td>1</td><td>1.5</td><td>2.5</td><td>2.5</td><td>4</td><td>10</td><td>10</td><td>16</td><td>16</td></tr>
<tr><td>Aluminum</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>25</td></tr>
<tr><td>Minimum cross-sectional area (sq. mm) of protective conductor for 0.4 sec. disconnection</td><td colspan="9">(Please refer to Table 11(5))</td></tr>
</table>

Note: The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.

</td><td>Deleted</td></tr>
<tr><td>60</td><td>Table 11(7)</td><td>

Table 11(7)

Minimum Cross-sectional Area of Protective Conductor for Circuit Protected by Moulded Case Circuit Breaker (MCCB) to IEC 60947-2 or Equivalent for 5 Sec. Disconnection

<table>
<tr><td colspan="2">MCCB Rating (Amp)</td><td>30</td><td>50</td><td>60</td><td>100</td><td>150</td><td>200</td><td>250</td><td>300</td><td>400</td></tr>
<tr><td rowspan="2">Minimum cross-sectional area (sq. mm) of protective conductor</td><td>Copper</td><td>6</td><td>10</td><td>10</td><td>10</td><td>10</td><td>10</td><td>10</td><td>16</td><td>16</td></tr>
<tr><td>Aluminum</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td><td>25</td><td>25</td></tr>
</table>

Note: The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.

</td><td>Deleted</td></tr>
</table>

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr>
<td>61</td>
<td>Table 11(8)
(Page 89)</td>
<td>
Table 11(8)
Maximum Earth Fault Loop Impedance for 0.4 Sec Disconnection when the Circuit is Protected by General Purpose (gG) Fuses and Motor Circuit Application (gM) fuses to BS88-2 Fuse Systems E (bolted) and G (clip-in) with Nominal Voltage Uo 220V
<table>
<tr><td>Fuse Rating (Amp)</td><td>2</td><td>4</td><td>6</td><td>10</td><td>16</td><td>20</td><td>25</td><td>32</td></tr>
<tr><td>Zs (ohm)</td><td>33.3</td><td>15.7</td><td>7.85</td><td>4.68</td><td>2.44</td><td>1.69</td><td>1.29</td><td>1.00</td></tr>
</table>
Note: The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.
</td>
<td>
Table 11(8)
Maximum Earth Fault Loop Impedance for 0.2 Sec or 0.4 Sec Disconnection when the Circuit is Protected by General Purpose (gG) Fuses and Motor Circuit Application (gM) fuses to BS88-2 Fuse Systems E (bolted) and G (clip-in) with Nominal Voltage Uo 220V
<table>
<tr><td>Fuse Rating (Amp)</td><td>2</td><td>4</td><td>6</td><td>10</td><td>16</td><td>20</td><td>25</td><td>32</td><td>40</td><td>50</td><td>63</td></tr>
<tr><td>Zs (ohm) for 0.2 Sec</td><td>29.43</td><td>13.06</td><td>6.53</td><td>3.87</td><td>2.09</td><td>1.39</td><td>1.10</td><td>0.8</td><td>0.61</td><td>0.45</td><td>0.34</td></tr>
<tr><td>Zs (ohm) for 0.4 Sec</td><td>31.66</td><td>14.92</td><td>7.46</td><td>4.44</td><td>2.32</td><td>1.60</td><td>1.22</td><td>0.95</td><td>0.72</td><td>0.55</td><td>0.41</td></tr>
</table>
Note: (1) The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.
(2) The circuit loop impedances given in the table should not exceeded when:
(i) the phase conductors are at the appropriate maximum permitted operating temperature; and
(ii) the circuit protective conductors are at the appropriate assumed initial temperature.
If the conductors are at different temperature when tested, the reading should be adjusted in accordance with BS 7671
</td>
</tr>
</table>

- The table is used <u>for reference only</u>. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr>
<td>62</td>
<td>Table 11(9)
(Page 90)</td>
<td>
Table 11(9)
Maximum Earth Fault Loop Impedance for 0.4 Sec. Disconnection when the Circuit is Protected by Fuses to BS1361 or Equivalent with Nominal Voltage Uo 220V
<table>
<tr><td>Fuse Rating (Amp)</td><td>5</td><td>15</td><td>20</td><td>30</td><td>45</td></tr>
<tr><td>Zs (ohm)</td><td>10</td><td>3.1</td><td>1.6</td><td>1.1</td><td>0.55</td></tr>
</table>
Note: The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.
</td>
<td>
Table 11(9)
Maximum Earth Fault Loop Impedance for 0.2 Sec or 0.4 Sec. Disconnection when the Circuit is Protected by Fuses to BS88-3 Fuse System C or Equivalent with Nominal Voltage Uo 220V
<table>
<tr><td>Fuse Rating (Amp)</td><td>5</td><td>16</td><td>20</td><td>32</td><td>45</td><td>63</td></tr>
<tr><td>Zs (ohm)for 0.2 Sec</td><td>8.36</td><td>1.90</td><td>1.54</td><td>0.74</td><td>0.46</td><td>0.29</td></tr>
<tr><td>Zs (ohm)for 0.4 Sec</td><td>9.50</td><td>2.20</td><td>1.84</td><td>0.87</td><td>0.55</td><td>0.34</td></tr>
</table>
Note: (1) The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.
(2) The circuit loop impedances given in the table should not exceeded when:
(i) the phase conductors are at the appropriate maximum permitted operating temperature; and
(ii) the circuit protective conductors are at the appropriate assumed initial temperature.
If the conductors are at different temperature when tested, the reading should be adjusted in accordance with BS 7671
</td>
</tr>
</table>

- The table is used <u>for reference only</u>. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr>
<td>63</td>
<td>Table 11(10)
(Page 90)</td>
<td>
Table 11(10)
Maximum Earth Fault Loop Impedance for 0.2 Sec., 0.4 Sec. and 5 Sec. Disconnection when the Circuit is Protected by Miniature Circuit Breaker (MCB) to IEC 60898 or Equivalent with Nominal Voltage Uo 220V
<table>
<tr><td>Rating (Amp)</td><td>6</td><td>10</td><td>16</td><td>20</td><td>32</td><td>40</td><td>50</td><td>63</td><td>80</td><td>100</td></tr>
<tr><td>Zs (ohm) for type B MCB and RCBO</td><td>7.33</td><td>4.4</td><td>2.75</td><td>2.2</td><td>1.38</td><td>1.1</td><td>0.88</td><td>0.70</td><td>0.55</td><td>0.44</td></tr>
<tr><td>Zs (ohm) for type C MCB and RCBO</td><td>3.67</td><td>2.2</td><td>1.38</td><td>1.1</td><td>0.69</td><td>0.55</td><td>0.44</td><td>0.35</td><td>0.28</td><td>0.22</td></tr>
</table>
Note: The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.
</td>
<td>
Table 11(10)
Maximum Earth Fault Loop Impedance for 0.2 Sec, 0.4 Sec. or 5 Sec. Disconnection when the Circuit is Protected by Miniature Circuit Breaker (MCB) to IEC 60898 or Equivalent with Nominal Voltage Uo 220V
<table>
<tr><td>Rating (Amp)</td><td>6</td><td>10</td><td>16</td><td>20</td><td>25</td><td>32</td><td>40</td><td>50</td><td>63</td><td>80</td><td>100</td><td>125</td></tr>
<tr><td>Zs (ohm) for type B MCB and RCBO*</td><td>6.96</td><td>4.17</td><td>2.61</td><td>2.09</td><td>1.67</td><td>1.31</td><td>1.04</td><td>0.83</td><td>0.65</td><td>0.52</td><td>0.42</td><td>0.33</td></tr>
<tr><td>Zs (ohm) for type C MCB and RCBO*</td><td>3.48</td><td>2.09</td><td>1.31</td><td>1.04</td><td>0.83</td><td>0.65</td><td>0.52</td><td>0.42</td><td>0.33</td><td>0.25</td><td>0.21</td><td>0.16</td></tr>
</table>
* For the overcurrent characteristics of RCBO to IEC 61009-1. Should the RCD characteristic of RCBO is used to satisfy the requirement of Code 11B(b), the maximum values of earth fault loop impedance in Table 11(14) may be applied.
Note: (1) The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.
(2) The circuit loop impedances given in the table should not exceeded when:
(i) the phase conductors are at the appropriate maximum permitted operating temperature; and
(ii) the circuit protective conductors are at the appropriate assumed initial temperature.
If the conductors are at different temperature when tested, the reading should be adjusted in accordance with BS 7671
</td>
</tr>
</table>

- The table is used <u>for reference only</u>. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td>64</td><td>Table 11(11)
(Page 90)</td><td>

Table 11(11)

Maximum Earth Fault Loop Impedance for 5 Sec Disconnection when the Circuit is Protected by General Purpose (gG) Fuses and Motor Circuit Application (gM) fuses to BS88-2 Fuse Systems E (bolted) and G (clip-in) with Nominal Voltage Uo 220V

Fuse Rating (Amp)	2	4	6	10	16	20	25	32	40	50	63	80	100	125	160	200
Zs (ohm)	44.0	20.9	12.2	6.87	4.00	2.82	2.20	1.76	1.29	1.00	0.78	0.55	0.42	0.32	0.26	0.18

Note: The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.

</td><td>

Table 11(11)

Maximum Earth Fault Loop Impedance for 5 Sec Disconnection when the Circuit is Protected by General Purpose (gG) Fuses and Motor Circuit Application (gM) fuses to BS88-2 Fuse Systems E (bolted) and G (clip-in) with Nominal Voltage Uo 220V

Fuse Rating (Amp)	2	4	6	10	16	20	25	32
Zs (ohm)	41.80	19.90	11.61	6.53	3.80	2.67	2.09	1.67

Fuse Rating (Amp)	40	50	63	80	100	125	160	200
Zs (ohm)	1.22	0.95	0.74	0.52	0.40	0.30	0.25	0.17

Note: (1) The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.

(2) The circuit loop impedances given in the table should not exceeded when:

(i) the phase conductors are at the appropriate maximum permitted operating temperature; and

(ii) the circuit protective conductors are at the appropriate assumed initial temperature.

If the conductors are at different temperature when tested, the reading should be adjusted in accordance with BS 7671

</td></tr>
<tr><td>65</td><td>Table 11(12)
(Page 91)</td><td>

Table 11(12)

Maximum Earth Fault Loop Impedance for 5 Sec. Disconnection when a Circuit is Protected by House-service Fuse to BS1361 or equivalent with Nominal Voltage Uo 220V

Fuse Rating (Amp)	5	15	20	30	45	60	80	100
Zs (ohm)	15.7	4.8	2.7	1.8	0.92	0.67	0.48	0.35

Note: The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.

</td><td>

Table 11(12)

Maximum Earth Fault Loop Impedance for 5 Sec. Disconnection when the Circuit is Protected by Fuses to BS88-3 Fuse System C or Equivalent with Nominal Voltage Uo 220V

Fuse Rating (Amp)	5	16	20	32	45	63	80	100
Zs (ohm)	13.93	3.73	3.07	1.49	0.95	0.65	0.48	0.36

Note: (1) The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.

(2) The circuit loop impedances given in the table should not exceeded when:

(i) the phase conductors are at the appropriate maximum permitted operating temperature; and

(ii) the circuit protective conductors are at the appropriate assumed initial temperature.

If the conductors are at different temperature when tested, the reading should be adjusted in accordance with BS 7671

</td></tr>
</table>

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td>66</td><td>Table 11(13)
(Page 91)</td><td>Table 11(13)
Maximum Earth Fault Loop Impedance for 5 Sec. Disconnection
when a Circuit is Protected by a Moulded Case Circuit Breaker (MCCB)
to IEC 60947-2 or Equivalent with Nominal Voltage Uo 220V
<table><tr><td colspan="2">MCCB Rating (Amp)</td><td>30</td><td>50</td><td>60</td><td>100</td><td>150</td><td>200</td><td>250</td><td>300</td><td>400</td></tr><tr><td colspan="2">MCCB Non-adjustable Zs (ohm)</td><td>0.56</td><td>0.44</td><td>0.42</td><td>0.125</td><td>0.09</td><td>0.07</td><td>0.06</td><td>0.05</td><td>0.04</td></tr><tr><td rowspan="2">MCCB Adjustable Zs (ohm)</td><td>Magnetic setting = 'LO'</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td><td>0.1</td><td>0.08</td><td>0.06</td></tr><tr><td>Magnetic setting = 'HI'</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td><td>0.05</td><td>0.04</td><td>0.03</td></tr></table>Note: The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.</td><td>Deleted</td></tr>
<tr><td>67</td><td>Table 11(14)
(Page 91)</td><td>Table 11(14)
Maximum Earth Fault Loop Impedance
when a Circuit is Protected by a Residual Current Device
<table><tr><td>Rated Residual Operating Current (mA)</td><td>5</td><td>10</td><td>20</td><td>30</td><td>100</td><td>300</td><td>500</td><td>1000</td><td>2000</td></tr><tr><td>Zs (ohm)</td><td>10000</td><td>5000</td><td>2500</td><td>1667</td><td>500</td><td>167</td><td>100</td><td>50</td><td>25</td></tr></table>Note: The table is based on nominal voltage to e.arth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.</td><td>Table 11(14)
Maximum Earth Fault Loop Impedance
when a Circuit is Protected by a Residual Current Device (RCD)
<table><tr><td>Rated Residual Operating Current (mA)</td><td>30</td><td>100</td><td>300</td><td>500</td></tr><tr><td>Zs (ohm)</td><td>1667</td><td>500</td><td>167</td><td>100</td></tr></table>Note: (1) The table is based on nominal voltage to earth with nominal voltage Uo at 220V and for reference only. Please refer to the manufacturer's data.
(2) The resistance of the installation earth electrode should be as low as practicable. A value exceeding 200ohms may not be stabl</td></tr>
<tr><td>68</td><td>Code 13A (3)(a)(iii)
(Page 99)</td><td>(iii) Determine the current carrying capacity of the conductors required by applying suitable correction factors to the nominal setting or current rating of the overcurrent protective device as divisors. Typical correction factors for ambient temperature, grouping, thermal insulation and type of protective device are given in Appendix 5.</td><td>(iii) Determine the current carrying capacity of the conductors required by applying suitable rating factors to the nominal setting or current rating of the overcurrent protective device as divisors. Typical rating factors for ambient temperature, grouping, thermal insulation and type of protective device are given in Appendix 5.</td></tr>
<tr><td>69</td><td>Code 13B(2)
(Page 100)</td><td>(2) Protection by other means
Other means of basic protection as stipulated in IEC 60364 or BS7671 are acceptable.</td><td>(2) Protection by other means
Other means of basic protection as stipulated in IEC 60364, BS7671 or other relevant international standards are acceptable.</td></tr>
<tr><td>70</td><td>Code 13D(2)(b)(iii)
(Page 102)</td><td>-</td><td>(iii) for use in a DC circuit should have its positive conductor coloured brown and negative conductor coloured grey.</td></tr>
</table>

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td>71</td><td>Table 13(1)
(Page 102)</td><td>

Table 13(1)

Minimum Size of PVC Copper Conductors in sq. mm under the General Installation Conditions Listed in Code 13A(4)

<table>
<tr><td rowspan="2">Current Rating (Amp)</td><td colspan="8">1-Phase 2-Wire</td><td colspan="9">3-Phase 4-Wire</td></tr>
<tr><td>5</td><td>15</td><td>20</td><td>30</td><td>60</td><td>80</td><td>100</td><td>5</td><td>15</td><td>20</td><td>30</td><td>60</td><td>100</td><td>150</td><td>200</td><td>300</td><td>400</td></tr>
<tr><td>Enclosed Condition</td><td>1.0</td><td>2.5</td><td>2.5</td><td>4</td><td>16</td><td>25</td><td>35</td><td>1.0</td><td>2.5</td><td>2.5</td><td>6</td><td>16</td><td>35</td><td>70</td><td>120</td><td>240</td><td>400</td></tr>
<tr><td>Clipped Direct</td><td>1.5</td><td>2.5</td><td>2.5</td><td>4</td><td>10</td><td>16</td><td>25</td><td>1.5</td><td>2.5</td><td>2.5</td><td>4</td><td>10</td><td>25</td><td>50</td><td>70</td><td>150</td><td>240</td></tr>
</table>

</td><td>

Table 13(1)

Minimum Size of PVC Copper Conductors in sq. mm under the General Installation Conditions Listed in Code 13A(4)

<table>
<tr><td rowspan="2">Current Rating (Amp)</td><td colspan="8">1-Phase 2-Wire</td><td colspan="9">3-Phase 4-Wire</td></tr>
<tr><td>5</td><td>10</td><td>15</td><td>20</td><td>30</td><td>60</td><td>80</td><td>100</td><td>5</td><td>10</td><td>15</td><td>20</td><td>30</td><td>60</td><td>100</td><td>150</td><td>200</td><td>300</td><td>400</td></tr>
<tr><td>Enclosed Condition</td><td>1.0</td><td>1.0</td><td>2.5</td><td>2.5</td><td>4</td><td>16</td><td>25</td><td>35</td><td>1.0</td><td>1.0</td><td>2.5</td><td>2.5</td><td>6</td><td>16</td><td>35</td><td>70</td><td>120</td><td>240</td><td>400</td></tr>
<tr><td>Clipped Direct</td><td>1.5</td><td>1.5</td><td>2.5</td><td>2.5</td><td>4</td><td>10</td><td>16</td><td>25</td><td>1.5</td><td>1.5</td><td>2.5</td><td>2.5</td><td>4</td><td>10</td><td>25</td><td>50</td><td>70</td><td>150</td><td>240</td></tr>
</table>

</td></tr>
</table>

- The table is used <u>for reference only</u>. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td>72</td><td>Table 13(2)
(Page 103)</td><td>
Table 13(2)
Identification of Non-flexible Cables and Bare Conductors for Fixed Wiring
<table>
<tr><td rowspan="2">Function</td><td colspan="2">Colour Code</td><td></td></tr>
<tr><td>Old Colour</td><td>New Colour</td><td>Coding</td></tr>
<tr><td>Phase of single phase circuit</td><td>Red (or Yellow or White or Blue)</td><td>Brown</td><td>L</td></tr>
<tr><td>Phase 1 of 3-phase circuit</td><td>Red</td><td>Brown</td><td>L1</td></tr>
<tr><td>Phase 2 of 3-phase circuit</td><td>Yellow (or White)</td><td>Black</td><td>L2</td></tr>
<tr><td>Phase 3 of 3-phase circuit</td><td>Blue</td><td>Grey</td><td>L3</td></tr>
<tr><td>Neutral</td><td>Black</td><td>Blue</td><td>N</td></tr>
<tr><td>Protective conductor</td><td>Green-and-yellow</td><td>Green-and-yellow</td><td>—</td></tr>
</table>
</td><td>
Table 13(2)
Identification of Non-flexible Cables and Bare Conductors for Fixed Wiring
<table>
<tr><td rowspan="2">Function</td><td colspan="2">Colour Code</td><td></td></tr>
<tr><td>Old Colour</td><td>New Colour</td><td>Coding</td></tr>
<tr><td colspan="4">a) For AC installation</td></tr>
<tr><td>Phase of single phase circuit</td><td>Red (or Yellow or White or Blue)</td><td>Brown</td><td>L</td></tr>
<tr><td>Phase 1 of 3-phase circuit</td><td>Red</td><td>Brown</td><td>L1</td></tr>
<tr><td>Phase 2 of 3-phase circuit</td><td>Yellow (or White)</td><td>Black</td><td>L2</td></tr>
<tr><td>Phase 3 of 3-phase circuit</td><td>Blue</td><td>Grey</td><td>L3</td></tr>
<tr><td>Neutral</td><td>Black</td><td>Blue</td><td>N</td></tr>
<tr><td>Protective conductor</td><td>Green-and-yellow</td><td>Green-and-yellow</td><td>—</td></tr>
<tr><td colspan="4">b) For DC installation (Two-wire unearthed DC power circuit)</td></tr>
<tr><td colspan="2">Function</td><td>Colour Code</td><td>Coding</td></tr>
<tr><td colspan="2">Positive of two-wire circuit (unearthed)</td><td>Brown</td><td>L+</td></tr>
<tr><td colspan="2">Negative of two-wire circuit (unearthed)</td><td>Grey</td><td>L-</td></tr>
<tr><td colspan="4">c) For DC installation (Two-wire earthed DC power circuit)</td></tr>
<tr><td colspan="2">Positive (of negative earthed) circuit</td><td>Brown</td><td>L+</td></tr>
<tr><td colspan="2">Negative (of negative earthed) circuit</td><td>Blue</td><td>M</td></tr>
<tr><td colspan="2">Positive (of positive earthed) circuit</td><td>Blue</td><td>M</td></tr>
<tr><td colspan="2">Negative (of positive earthed) circuit</td><td>Grey</td><td>L-</td></tr>
</table>
</td></tr>
<tr><td>73</td><td>Code 14A(1)(a)(i)
(Page 105)</td><td>(i) have a cross-sectional area not less than that determined from the application of Code 11C(2)(e) or verified by test in accordance with IEC 60439-1 or equivalent;</td><td>(i) have a cross-sectional area not less than that determined from the application of Code 11C(2)(e) or verified by test in accordance with IEC 61439-1 or equivalent;</td></tr>
<tr><td>74</td><td>Code 14(B)(1)(a)
(Page 105)</td><td>(a) Steel conduits and fitting with metric thread, except flexible conduits, should be of heavy gauge, longitudinally welded type and comply with BS4568, BS EN 60423, BS EN 61386,</td><td>(a) Steel conduits and fitting with metric thread, except flexibleconduits, should be of heavy gauge, longitudinally welded typeand comply with IEC 61386 or equivalent. The nominal minimum</td></tr>
</table>

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
		IEC 60423, IEC 61386 or equivalent. The nominal minimum outside diameter of any rigid conduit to be used should be 16 mm with a minimum wall thickness of 1.4 mm.	outside diameter of any rigidconduit to be used should be 16 mm with a minimum wall thickness of 1.4 mm.
75	Code 14(B)(2)(a) (Page 106)	(a) The steel conduit installation should be made mechanically and electrically continuous throughout, be effectively earthed and comply with BS4568, BS EN 60423, BS EN 61386, IEC 60423, IEC 61386 or equivalent.	(a) The steel conduit installation should be made mechanically and electrically continuous throughout, be effectively earthed and comply with IEC 60423, IEC 61386 or equivalent.
76	Code 14D(1)(a) (Page 107)	(a) Rigid plastic or PVC conduits and conduit fittings should be of such strength to withstand the stress under the installed conditions. They should comply with BS4607: Part 1 and 2, BS EN 61386, IEC 61386 or equivalent	(a) Rigid plastic or PVC conduits and conduit fittings should be of such strength to withstand the stress under the installed conditions. They should comply with BS4607: Part 1 and 2, IEC 61386 or equivalent.
77	Code 14F (Page 109)	Requirements for the enclosures of busbar trunking system are described inCode 26B. A powertrack system should comply with BS EN 61534 series.	Requirements for the enclosures of busbar trunking system are described in Code 26B. A powertrack system should comply with IEC 61534 series.

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td>78</td><td>Table 14(3)(b)
(Page 111)</td><td>(b) Conduit Factor
<table>
<tr><td rowspan="3">Length of Run (m)</td><td colspan="24">Conduit Diameter (mm)</td></tr>
<tr><td colspan="4">Straight</td><td colspan="4">One bend</td><td colspan="4">Two bends</td><td colspan="4">Three bends</td><td colspan="4">Four bends</td></tr>
<tr><td>16</td><td>20</td><td>25</td><td>32</td><td>16</td><td>20</td><td>25</td><td>32</td><td>16</td><td>20</td><td>25</td><td>32</td><td>16</td><td>20</td><td>25</td><td>32</td><td>16</td><td>20</td><td>25</td><td>32</td></tr>
<tr><td>1</td><td colspan="4" rowspan="5">Covered by Tables 14(2) (a) and (b)</td><td>188</td><td>303</td><td>543</td><td>947</td><td>177</td><td>286</td><td>514</td><td>900</td><td>158</td><td>256</td><td>463</td><td>818</td><td>130</td><td>213</td><td>388</td><td>692</td></tr>
<tr><td>1.5</td><td>182</td><td>294</td><td>528</td><td>923</td><td>167</td><td>270</td><td>487</td><td>857</td><td>143</td><td>233</td><td>422</td><td>750</td><td>111</td><td>182</td><td>333</td><td>600</td></tr>
<tr><td>2</td><td>177</td><td>286</td><td>514</td><td>900</td><td>158</td><td>256</td><td>463</td><td>818</td><td>130</td><td>213</td><td>388</td><td>692</td><td>97</td><td>159</td><td>292</td><td>529</td></tr>
<tr><td>2.5</td><td>171</td><td>278</td><td>500</td><td>878</td><td>150</td><td>244</td><td>442</td><td>783</td><td>120</td><td>196</td><td>358</td><td>643</td><td>86</td><td>141</td><td>260</td><td>474</td></tr>
<tr><td>3</td><td>167</td><td>270</td><td>487</td><td>857</td><td>143</td><td>233</td><td>422</td><td>750</td><td>111</td><td>182</td><td>333</td><td>600</td><td></td><td></td><td></td><td></td></tr>
<tr><td>3.5</td><td>179</td><td>290</td><td>521</td><td>911</td><td>162</td><td>263</td><td>475</td><td>837</td><td>136</td><td>222</td><td>404</td><td>720</td><td>103</td><td>169</td><td>311</td><td>563</td><td></td><td></td><td></td><td></td></tr>
<tr><td>4</td><td>177</td><td>286</td><td>514</td><td>900</td><td>158</td><td>256</td><td>463</td><td>818</td><td>130</td><td>213</td><td>388</td><td>692</td><td>97</td><td>159</td><td>292</td><td>529</td><td></td><td></td><td></td><td></td></tr>
<tr><td>4.5</td><td>174</td><td>282</td><td>507</td><td>889</td><td>154</td><td>250</td><td>452</td><td>800</td><td>125</td><td>204</td><td>373</td><td>667</td><td>91</td><td>149</td><td>275</td><td>500</td><td></td><td></td><td></td><td></td></tr>
<tr><td>5</td><td>171</td><td>278</td><td>500</td><td>878</td><td>150</td><td>244</td><td>442</td><td>783</td><td>120</td><td>196</td><td>358</td><td>643</td><td>86</td><td>141</td><td>260</td><td>474</td><td></td><td></td><td></td><td></td></tr>
<tr><td>6</td><td>167</td><td>270</td><td>487</td><td>857</td><td>143</td><td>233</td><td>422</td><td>750</td><td>111</td><td>182</td><td>333</td><td>600</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>7</td><td>162</td><td>263</td><td>475</td><td>837</td><td>136</td><td>222</td><td>404</td><td>720</td><td>103</td><td>169</td><td>311</td><td>563</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>8</td><td>158</td><td>256</td><td>463</td><td>818</td><td>130</td><td>213</td><td>388</td><td>692</td><td>97</td><td>159</td><td>292</td><td>529</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>9</td><td>154</td><td>250</td><td>452</td><td>800</td><td>125</td><td>204</td><td>373</td><td>667</td><td>91</td><td>149</td><td>275</td><td>500</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>10</td><td>150</td><td>244</td><td>442</td><td>783</td><td>120</td><td>196</td><td>358</td><td>643</td><td>86</td><td>141</td><td>260</td><td>474</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table></td><td>(b) Conduit Factor
<table>
<tr><td rowspan="3">Length of Run (m)</td><td colspan="12">Conduit Diameter (mm)</td></tr>
<tr><td colspan="4">Straight</td><td colspan="4">One bend</td><td colspan="4">Two bends</td></tr>
<tr><td>16</td><td>20</td><td>25</td><td>32</td><td>16</td><td>20</td><td>25</td><td>32</td><td>16</td><td>20</td><td>25</td><td>32</td></tr>
<tr><td>1</td><td colspan="4" rowspan="5">Covered by Tables 14(2) (a) and (b)</td><td>188</td><td>303</td><td>543</td><td>947</td><td>177</td><td>286</td><td>514</td><td>900</td></tr>
<tr><td>1.5</td><td>182</td><td>294</td><td>528</td><td>923</td><td>167</td><td>270</td><td>487</td><td>857</td></tr>
<tr><td>2</td><td>177</td><td>286</td><td>514</td><td>900</td><td>158</td><td>256</td><td>463</td><td>818</td></tr>
<tr><td>2.5</td><td>171</td><td>278</td><td>500</td><td>878</td><td>150</td><td>244</td><td>442</td><td>783</td></tr>
<tr><td>3</td><td>167</td><td>270</td><td>487</td><td>857</td><td>143</td><td>233</td><td>422</td><td>750</td></tr>
<tr><td>3.5</td><td>179</td><td>290</td><td>521</td><td>911</td><td>162</td><td>263</td><td>475</td><td>837</td><td>136</td><td>222</td><td>404</td><td>720</td></tr>
<tr><td>4</td><td>177</td><td>286</td><td>514</td><td>900</td><td>158</td><td>256</td><td>463</td><td>818</td><td>130</td><td>213</td><td>388</td><td>692</td></tr>
<tr><td>4.5</td><td>174</td><td>282</td><td>507</td><td>889</td><td>154</td><td>250</td><td>452</td><td>800</td><td>125</td><td>204</td><td>373</td><td>667</td></tr>
<tr><td>5</td><td>171</td><td>278</td><td>500</td><td>878</td><td>150</td><td>244</td><td>442</td><td>783</td><td>120</td><td>196</td><td>358</td><td>643</td></tr>
<tr><td>6</td><td>167</td><td>270</td><td>487</td><td>857</td><td>143</td><td>233</td><td>422</td><td>750</td><td>111</td><td>182</td><td>333</td><td>600</td></tr>
<tr><td>7</td><td>162</td><td>263</td><td>475</td><td>837</td><td>136</td><td>222</td><td>404</td><td>720</td><td>103</td><td>169</td><td>311</td><td>563</td></tr>
<tr><td>8</td><td>158</td><td>256</td><td>463</td><td>818</td><td>130</td><td>213</td><td>388</td><td>692</td><td>97</td><td>159</td><td>292</td><td>529</td></tr>
<tr><td>9</td><td>154</td><td>250</td><td>452</td><td>800</td><td>125</td><td>204</td><td>373</td><td>667</td><td>91</td><td>149</td><td>275</td><td>500</td></tr>
<tr><td>10</td><td>150</td><td>244</td><td>442</td><td>783</td><td>120</td><td>196</td><td>358</td><td>643</td><td>86</td><td>141</td><td>260</td><td>474</td></tr>
</table></td></tr>
<tr><td>79</td><td>Code 15G
(Page 119)</td><td>15G Other Mechanical Stresses</td><td>15G Other Mechanical Stresses (AJ)</td></tr>
</table>

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td>80</td><td>Table 15(1)
(Page 120)</td><td>
Table 15(1)
Maximum Permissible Operating Temperature of Various Classes of Insulation to IEC 60085
<table>
<tr><td>Class</td><td></td><td>Y</td><td>A</td><td>E</td><td>B</td><td>F</td><td>H</td><td>200</td><td>220</td><td>250</td></tr>
<tr><td>Temperature</td><td>°C</td><td>90</td><td>105</td><td>120</td><td>130</td><td>155</td><td>180</td><td>200</td><td>220</td><td>250</td></tr>
</table>
Note: 1. Temperatures over 250°C should be increased by 25°C intervals and classes designated accordingly.
2. The information above is extracted from IEC 60085 ed.2.0 "Copyright©1984 IEC Geneva, Switzerland.www.iec.ch".
</td><td>
Table 15(1)
Thermal Classification of Electrical Insulating Materials to IEC 60085-2007
<table>
<tr><th colspan="2">ATE or RTE
°C</th><th>Thermal class
°C</th><th>Letter designation[a]</th></tr>
<tr><td>≥90</td><td><105</td><td>90</td><td>Y</td></tr>
<tr><td>≥105</td><td><120</td><td>105</td><td>A</td></tr>
<tr><td>≥120</td><td><130</td><td>120</td><td>E</td></tr>
<tr><td>≥130</td><td><155</td><td>130</td><td>B</td></tr>
<tr><td>≥155</td><td><180</td><td>155</td><td>F</td></tr>
<tr><td>≥180</td><td><200</td><td>180</td><td>H</td></tr>
<tr><td>≥200</td><td><220</td><td>200</td><td>N</td></tr>
<tr><td>≥220</td><td><250</td><td>220</td><td>R</td></tr>
<tr><td>≥250[b]</td><td><275</td><td>250</td><td>-</td></tr>
</table>
[a] If desired, the letter designation may be added in parentheses, e.g. Class 180(H). Where space is a factor, such as on a nameplate, the product TC may elect to use only the letter designation.
[b] Designations of thermal classes over 250 shall increase by increments of 25 and be designated accordingly.
Note: The information above is extracted from IEC 60085 ed.4.0 "Copyright©2007 IEC Geneva, Switzerland.www.iec.ch".
</td></tr>
<tr><td>81</td><td>Code 17A(4)
(Page 130)</td><td>(4) Warning notice for high voltage installations
'DANGER – HIGH VOLTAGE' and ' 危險 – 高壓 ' in legible letters andcharacters each not less than 30 mm high should be displayed at the high voltage installation.
'DANGER – HIGH VOLTAGE' and ' 危險 – 高壓 ' in legible letters and characters each not less than 50 mm high should be displayed along a cable run easily accessible by public. (Remarks : An interval of not more than 3m is generally acceptable. Warning notices 'DANGER – HIGH VOLTAGE' and ' 危險 – 高壓 ' currently used for low voltage installation should no longer be used.)</td><td>(4) Warning notice for high voltage installations
'DANGER – HIGH VOLTAGE' and ' 危險 – 高壓 ' in legible letters and characters each not less than 30 mm high should be displayed at the HV installation.
'DANGER – HIGH VOLTAGE' and ' 危險 – 高壓 ' in legible letters and characters each not less than 50 mm high should be displayed along a cable run easily accessible by public. (Remarks : An interval between warning notices of not more than 3m is generally acceptable. Warning notices 'DANGER – HIGH VOLTAGE' and ' 危險 – 高壓 ' currently used for LV installationshould no longer be used.)</td></tr>
</table>

➢ The table is used for reference only. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
82	Code 17B (Page 130)	17B Warning Notice for Connection of Earthing and Bonding Conductors	17B Warning Notice for Connection of Earthing and Main Bonding Conductors
83	Code 17G	-	17G Notice for Renewable Energy Power System (1) Warning Notice for Renewable Energy Power System (a) 'DANGER' and '危險' in white legible letters and characters each not less than 10mm high, in red background and displayed at or near DC switchgear is acceptable; and (b) 'Warning-Dual Supply' and '警告- 雙供電' in black legible letters and characters each not less than 10mm high, in yellow background and displayed at all electrical equipment with dual power supply is acceptable. (2) Notice for Renewable Energy Power System Notice showing the name and registration number of the registered electrical contractor employed for maintaining the generating facility in continuous safe work order, in legible letters and characters each not less than 5mm, displayed at the facility is acceptable.
84	Code 19B(e) (Page 137)	(e) Proforma of the Work Completion Certificate can be obtained from EMSD's Customer Services Office or downloaded from www.info.gov.hk/forms.	(e) Proforma of the Work Completion Certificate can be obtained from EMSD's Customer Services Office or downloaded from https://www.emsd.gov.hk/filemanager/en/share/electricity_safety/public_forms/wr1.pdf.
85	Code 20A(2) (page 156)	(a) Premises for the manufacturing or storing of dangerous goods classified under categories of the Dangerous Goods (Application and Exemption) Regulations (Cap. 295), previously known as the Dangerous Goods (Classification) Regulations, are as follows:	(a) Premises for the manufacturing or storing of dangerous goods classified under categories of the Dangerous Goods (Application and Exemption) Regulations (Cap.295A), previously known as the Dangerous Goods (Classification) Regulations, are as follows:

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

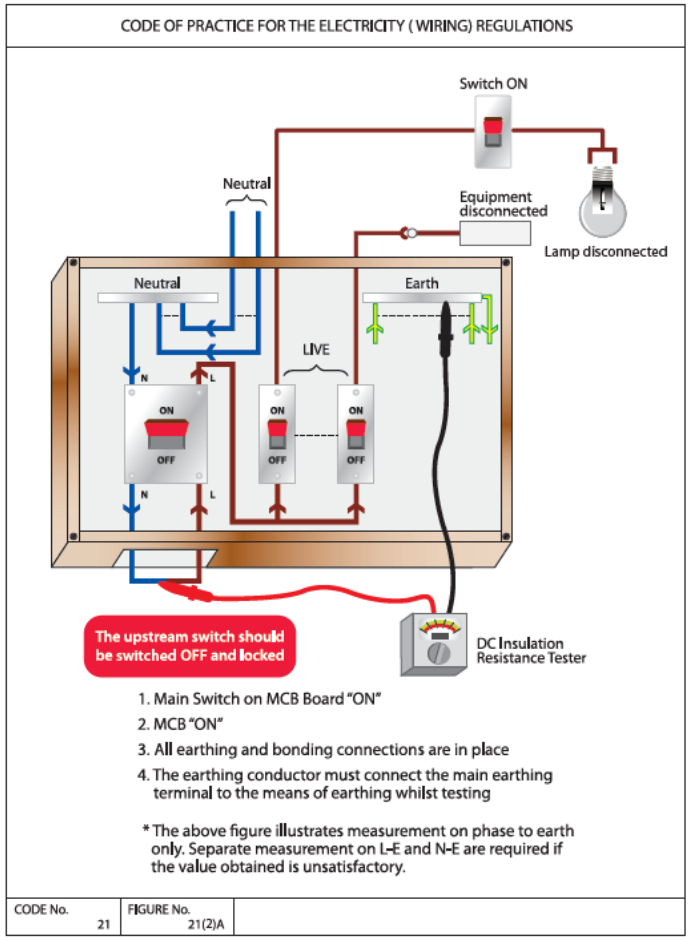
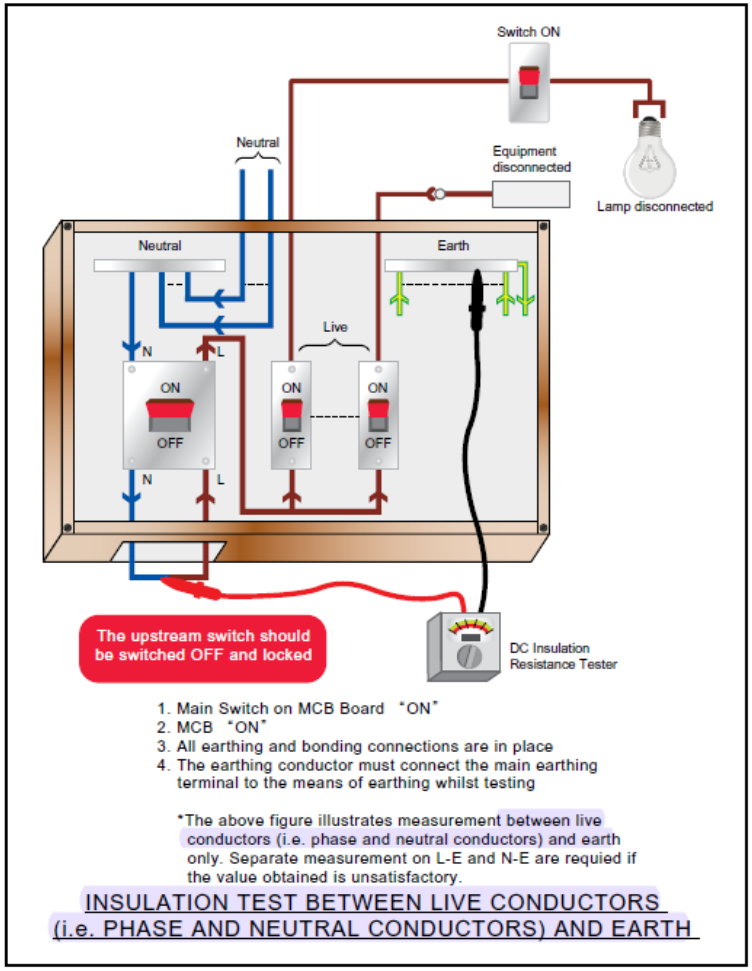
Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
86	Code 21B(3) (page) (Page 144)	(3) Continuity of protective conductors Every protective conductor, including all conductors and any extraneous conductive parts used for equipotential bonding should be tested for continuity. The test should be made by connecting together the neutral and protective conductors at the mains position and checking between earth and neutral at every outlet by a continuity tester, which should show a reading near zero.	(3) Continuity of protective conductors Every protective conductor, including all conductors and any extraneous conductive parts used for equipotential bonding should be tested for continuity. The test should be made by connecting together the neutral and protective conductors at the mains position and checking between earth and neutral at every outlet by a continuity tester, which should show a reading near zero. If no neutral was available at the testing position, an extra conductor should be used to extend testing probe of the continuity test for the test.
87	Code 21B(7)(a) (Page 146)	(a) A proper earth electrode resistance tester should be used to measure earth electrode resistance. An alternating current at 50 Hz of a steady value is passed between the earth electrode T and an auxiliary earth electrode T1 placed at a separation distance recommended by the manufacturer of the tester but in any case should not be less than 20 metres away.	(a) A proper earth electrode resistance tester should be used, by making reference to the user guides as recommended by the manufacturer, to measure earth electrode resistance. An alternating current at 50 Hz of a steady value is passed between the earth electrode T and an auxiliary earth electrode T placed at a separation distance recommended by the manufacturer of the tester but in any case should not be less than 20 metres away.
88	Code 21E(6) (Page 151)	(6) Standard symbols to be used Standard symbols to Appendix 8 should be used in schematic diagrams where appropriate	(6) Standard symbols to be used Standard symbols to Appendix 8 or as stipulated in IEC 60617 should be used in schematic diagrams where appropriate.

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

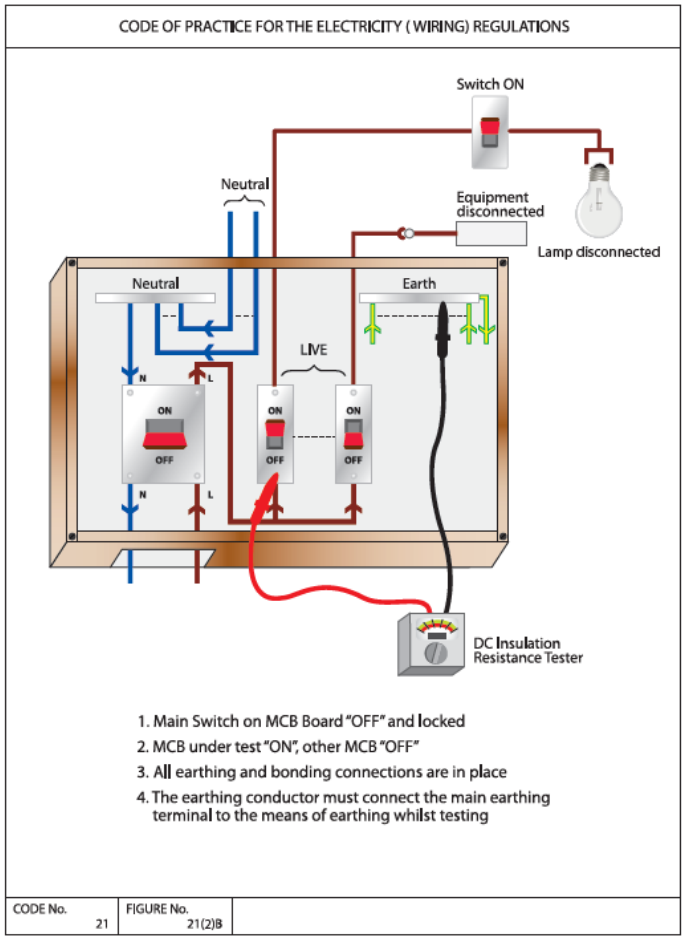
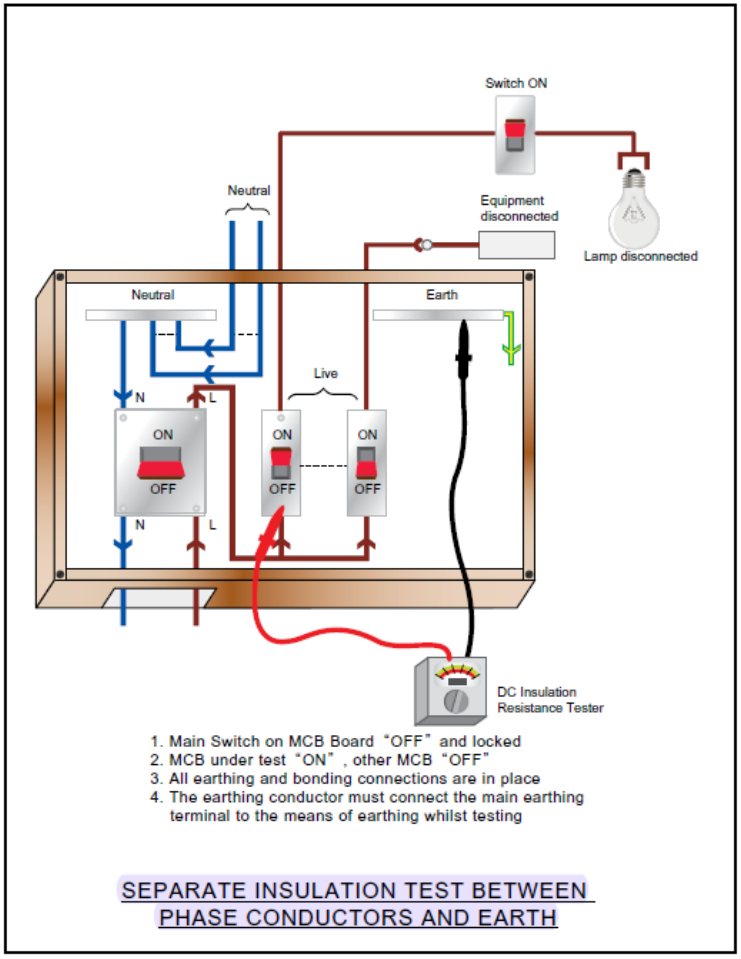
Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
89	Figure 21(2)A (Page 154)		 CODE NO.21 FIGURE NO.21(2)A

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

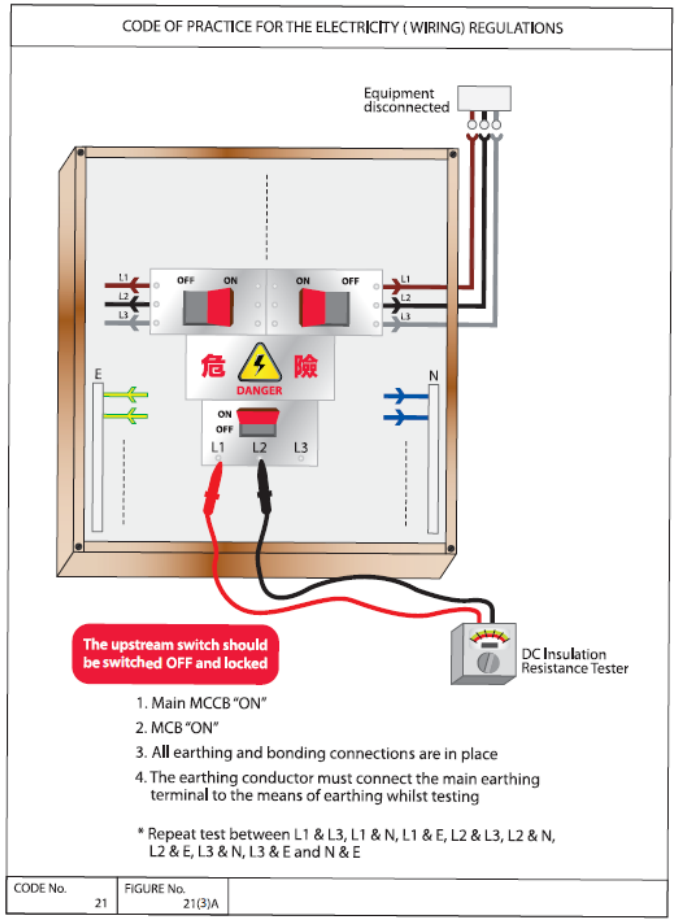
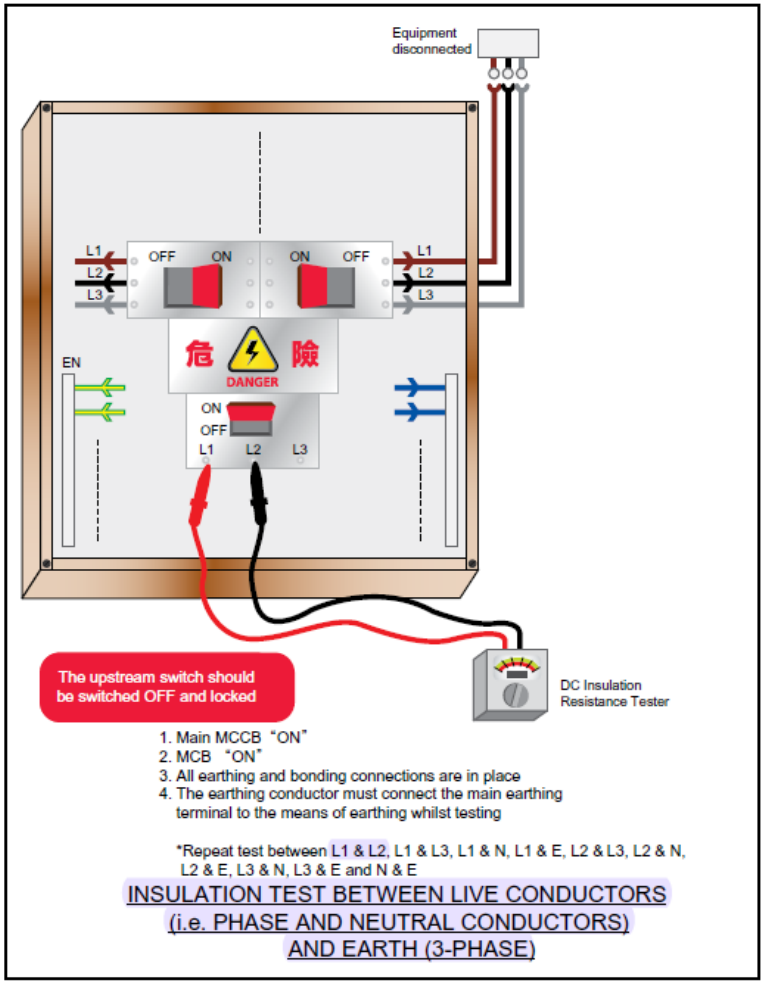
Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
90	Figure 21(2)B (Page 155)		 CODE NO.21 FIGURE NO.21(2)B

➢ The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

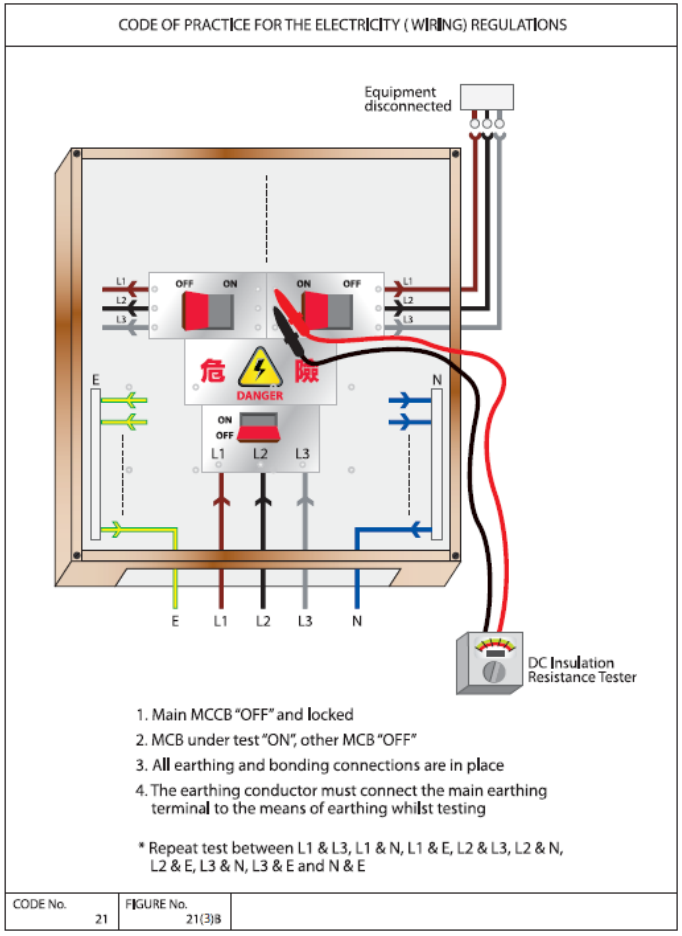
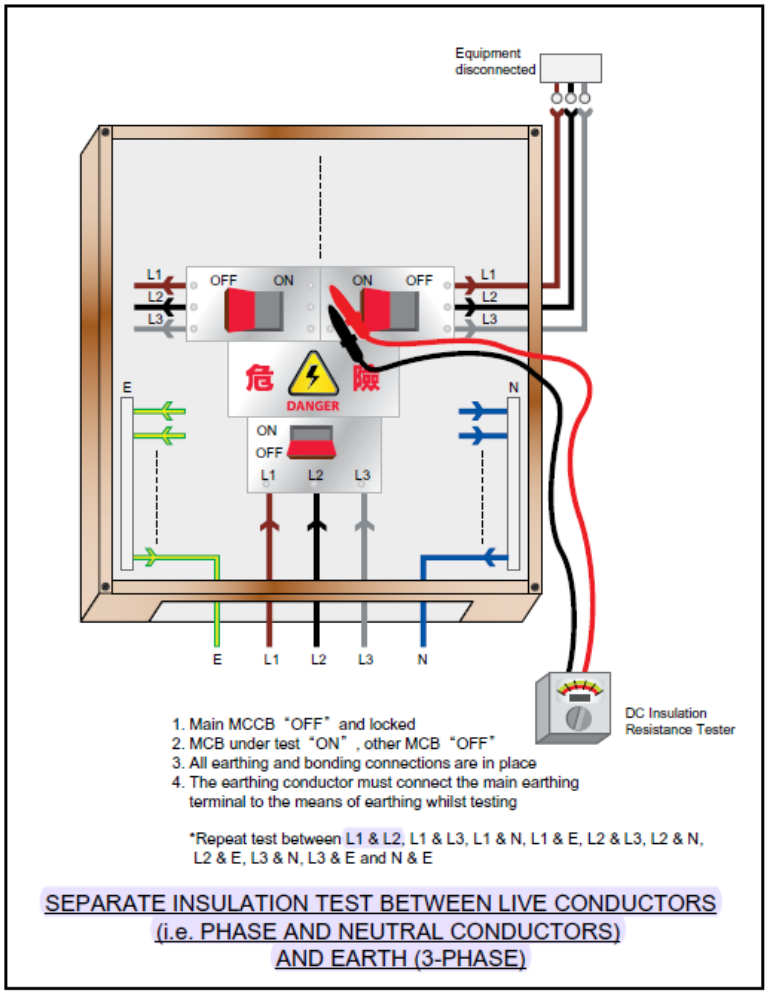
Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
91	Figure 21(3)A (Page 156)		 CODE NO.21 FIGURE NO.21(3)A

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

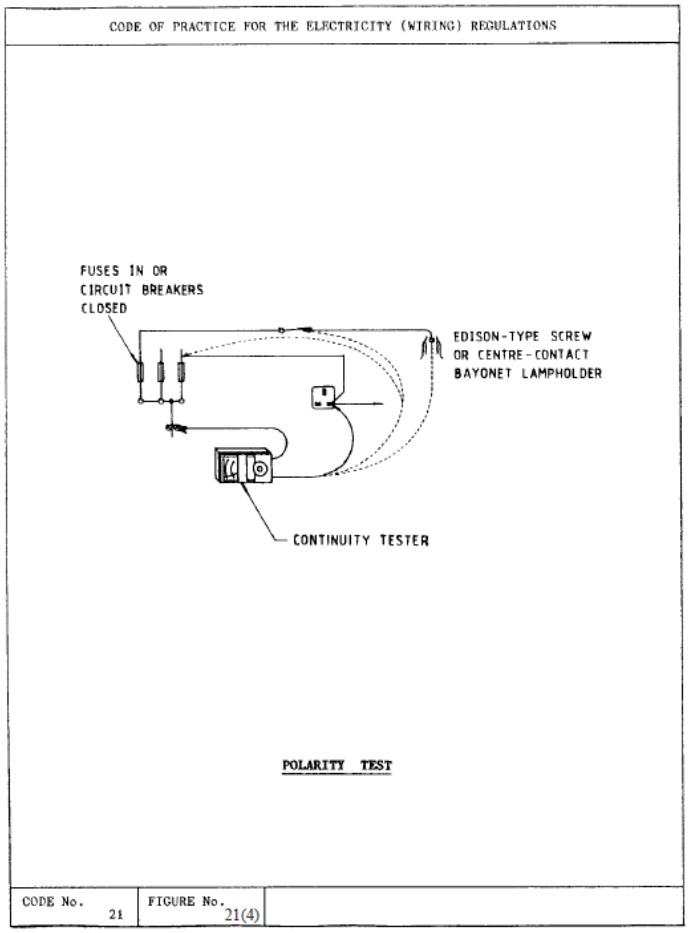
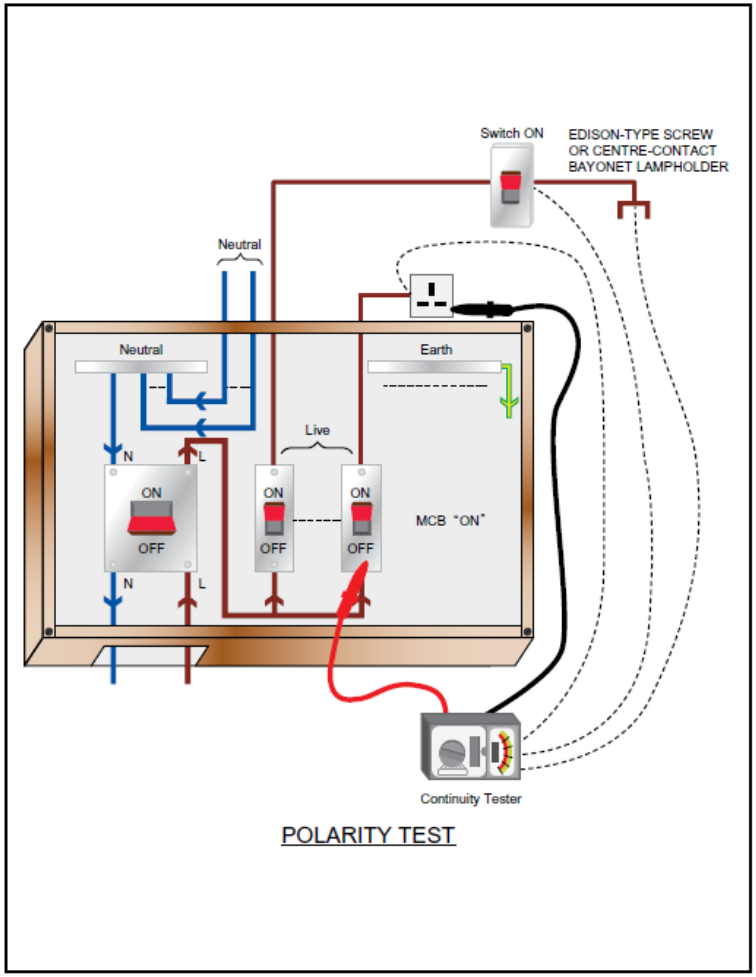
Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
92	Figure 21(3)B (Page 157)		 CODE NO.21 FIGURE NO.21(3)B

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
93	Figure 21(4) (Page 158)		 CODE NO.21 FIGURE NO.21(4)

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
94	Code 22C(a) (Page 160)	(a) For the purpose of Code 22B, a simple single line diagram with symbols to Appendix 8 and simple test results against the lists of items to be inspected and tested detailed in a number of checklists under Code 22D together with test data recorded in the Schedule of Test Results for Electrical Wiring (sample shown in Appendix 13) are acceptable as proper records.	(a) For the purpose of Code 22B, a simple single line diagram with symbols to Appendix 8 or with standard symbols as stipulated in IEC 60617 and simple test results against the lists of items to be inspected and tested detailed in a number of checklists under Code 22D together with test data recorded in the Schedule of Test Results for Electrical Wiring (sample shown in Appendix 13) are acceptable as proper records.
95	Code 22D(1) (Page 161)	*Requirements* / *Checklists to be Used* (a) Periodic inspection and testing for a low voltage installation which was connected to supply: (i) before 1.1.1985 — 1 (ii) on or after 1.1.1985 and before 1.6.1992 — 1 and 2 (iii) on or after 1.6.1992 — 1, 2 and 3 (b) Inspection and testing carried out upon completion of any electrical work for a low voltage installation — 1, 2, 3 and 4	Requirements / Checklists to be Used (a) Periodic inspection and testing for a low voltage installation — 1 (b) Inspection and testing carried out upon completion of any electrical work for a low voltage installation — 1 and 2 (c) Inspection and testing for Renewable Energy Power System Installations — 3
96	Code 25B(3)(b) (Page 167)	(b) The trunking should be fixed and supported in the normal way by screws, but the holes in the trunking should be made oversize to allow for the movement of expansion. Washers should be used under the head of the screw which should not be tightened to its full extent.	(b) The trunking should be fixed and supported as recommended by the manufacturer or in the normal way by screws, but the holes in the trunking should be made oversize to allow for the movement of expansion. Washers should be used under the head of the screw which should not be tightened to its full extent.
97	Code 25C(2)(a) (Page 169)	(a) Where protection is required for cables running up a wall from the floor, a metal channel cover should be fixed to a minimum height of 1.5 metres above finished floor level.	(a) Where protection is required for cables running up a wall from the floor, a metal channel cover should be fixed to a minimum height of 1.5 m above finished floor level.
98	Code25D(1) (Page 170)	(1) Cable joint Cable joints of any type along cable runs in final circuits are not allowed. "Looping-in" wiring system should be used such that the cables or conductors are properly terminated at the junction box or equipment.	(1) Cable joint Cable joints of any type along cable runs in final circuits are not allowed. "Looping-in" wiring system or termination box should be used such that the cables or conductors are properly terminated at the junction box or equipment.
99	Code25D(2)(a) (Page 170)	(a) Boxes for the termination and for joining of cables may be of cast iron, or plastic shell with compound filled and of adequate size.	(a) Boxes for the termination and for joining of cables may be of cast iron, or plastic shell with compound filled, or termination box and of adequate size.

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
100	Code25D(2)(e)	-	(e) Where termination box is used, it should be complied with BS 4662 or IEC 60670-1. The cables shall be terminated with fix-mounted terminal blocks complying with IEC 60947-7 series.
101	Code25D(5)(b) (Page 172)	(b) Tapes should be jointed by: (i) double riveting, or (ii) suitable tape clamps (when clamps are used, the tape clamps shall each be provided with at least 4 screws or bolts), or	(b) Protective tapes should be jointed by: (i) double riveting, or (ii) suitable tape clamps (when tape clamps are used, the tape clamps shall each be provided with at least 4 screws or bolts), or
102	Code 25E(d) (Page 174)	(d) A socket outlet should be installed as far away as practicable from water tap, gas tap or cooker in order to avoid danger.	(d) A socket outlet should be installed as far away as practicable from water tap, gas tap or cooker in order to avoid danger in relation to water splash and thermal effect.
103	Code 26 Content Page (Page 181)	26M Swimming Pools and Fountains Installation (1) General (2) Assessment of general characteristics (3) Bonding (4) Application of protective measures against electric shock (5) Selection and erection of equipment	26M Swimming Pools and Fountains Installation (1) General (2) Assessment of general characteristics (3) Bonding (4) Application of protective measures against electric shock (5) Selection and erection of equipment (6) Fountains
104	Code 26 Content Page (Page 181)	26S Charging Facilities for Electric Vehicles	26S Charging Facilities for Electric Vehicles (1) General (2) Classification of charging mode (3) Selection and erection of installation (4) Protection for safety
105	Code 26 Content Page	-	26T Installation for Modular Integrated Construction (1) Scope (2) Certification of electrical work (3) Selection of equipment and materials (4) Selection and erection of wiring installation (5) Requirements on wiring installation (6) Requirements on prefabricated wiring systems
106	Code 26A(3)(d)(i) (Page 183)	(i) the insulating cords of cord-operated switches which comply with IEC 60669-1 or BS EN 60669-1 or equivalent;	(i) the insulating cords of cord-operated switches which comply with IEC 60669-1 or equivalent;

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
107	Code 26A (3)(e) (Page 184)	In a room containing a fixed bath or shower, provision for the connection of an electric shaver, toothbrush or similar light current appliance can be by means of a shaver supply unit complying with BS EN 61558-2-5 or such a unit incorporated in a luminaire (should be installed beyond Zone 2*). The earthing terminal of the shaversupply unit should be connected to the protective conductor of the final circuit from which the supply is derived.	In a room containing a fixed bath or shower, provision for the connection of an electric shaver, toothbrush or similar light current appliance can be by means of a shaver supply unit complying with IEC 61558-2-5 or such a unit incorporated in a luminaire (should be installed beyond Zone 2*). The earthing terminal of the shaver supply unit should be connected to the protective conductor of the final circuit from which the supply is derived.
108	Code 26B(1)(a) (Page 187)	(a) The busbar trunking system should comply with IEC 60439-2 / BS EN 60439-2 and should be properly supported.	(a) The busbar trunking system should comply with IEC 61439-6 and should be properly supported.
109	Code 26I (Page 195)	Lightning protection installations should be installed to IEC 62305, BS EN 62305, AS/NZS 1768, NFPA 780 or equivalent.	Lightning protection installations are not statutory requirement under Electricity (Wiring) Regulations. However, in case the installation of lightning protection system is required in buildings, reference could be made to IEC 62305, AS/NZS 1768, NFPA 780 or equivalent, as well as the relevant practice notes published by Buildings Department.
110	Code 26P (1) (Page 209)	(1) Scope The particular requirements of this Code should apply to renewable energy power system (REPS) installations.	(1) Scope The particular requirements of this Code should apply to all renewable energy power system (REPS) installations, specifically for solar PV and wind turbine systems. Other REPS installations (e.g. hydroelectric, RE from waste, including landfill gas or biogas) should be designed and installed in accordance with the relevant requirement in this Code and national/international standards.

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
111	Code 26P (2) (Page 209)	(2) Selection and erection of installation The REPS installation should be selected and erected to ensure safe operation and ease of maintenance at all times. The REPS should be designed and installed in accordance with the requirements specified in the Technical Guidelines on Grid Connection of Renewable Energy Power Systems published by the Energy Efficiency Office (EEO) of EMSD as appropriate and other relevant national / international standards such as IEC 60364-7-712, IEC 61400-2, BS 7671 or equivalent.	(2) Selection and erection of installation (a) The REPS installation should be selected and erected to ensure safe operation and ease of maintenance at all times. The REPS should be designed and installed in accordance with IEC 60364-7-712, BS 7671 or equivalent for PV power supply systems, and IEC 61400-2 or equivalent for small wind turbines. The typical equipment for PV power supply system is illustrated in Figure 26(7). (b) REPSs with aggregated power rating greater than 200kW should be referred to the power company on a case-by-case basis as more technical considerations on the power company's side may possibly be required. The final design details and the grid connection arrangement should be agreed by both the power company and the owner. (c) Electrical equipment on the DC side shall be suitable for direct voltage and direct current. (d) PV modules or panels shall comply with (i) IEC 61215/ BS EN 61215 and IEC 61730; or (ii) UL 1703; or (iii) equivalent. (e) PV string cables, PV array cables and PV DC main cables should be selected and erected so as to minimize the risk of earth faults and short-circuits, for example, by the use of reinforced or double-insulated cables to BS EN 50618. (f) PV inverters shall comply with IEC 62109/BS EN 62109, UL 1741 or equivalent. (g) Power frequency (50Hz) isolation transformers in compliance with IEC 61558 or equivalent should be installed to provide simple separation between the primary side (DC side) and the secondary side (AC side) of PV power supply systems. (h) Where protective bonding conductors are installed, they shall be in parallel and as close as possible to the DC cables, and AC cables and their accessories. (i) The selection and erection of equipment should facilitate safe maintenance and should not adversely affect the provisions made by the manufacturer of the REPS equipment to enable maintenance or service work to be carried out safely. (j) The REPS should incorporate appropriate protection facilities to

Item	Code / Table / Appendix	2015 Edition	2020 Edition
			avoid damage to the REPS caused by transient abnormalities that would occur in the distribution system and the supply network operated by power company, such as supply interruption, voltage and frequency fluctuation, and voltage dip. (k) In selecting and using REPS installations to run in parallel with the system for distribution of electricity to the public, care shall be taken to avoid adverse effects to that system and to other installations in respect of power factor, voltage level, harmonic distortion, unbalance, starting, synchronizing orand voltage fluctuation. Where synchronization is necessary, the use of an automatic synchronizing system which considers frequency, phase and voltage is to be preferred. Means of automatic switching to avoid unsynchronized connection shall be provided to disconnect the REPS installation from the system for distribution of electricity to the public in the event of loss of that supply or deviation of the voltage or frequency at the supply terminals from declared values.
112	Code 26P (3) (Page 209)	(3) Inspection, testing and maintenance An owner of the REPS should ensure that the REPS and its associated electrical equipment be regularly inspected and maintained in a safe and proper working condition in accordance with manufacturer's guidelines / instructions and the relevant requirements in the CoP. For REPS connected in parallel with supply from an electricity supplier, special attention should be paid to ensure that the REPS should be automatically disconnected from the mains supply when the mains supply was tripped. During maintenance, the power generation side of REPS should be isolated to prevent electric shock to electrical workers, as the REPS can still be energised even when the REPS is isolated from the a.c. side.	(3) Protection for safety (a) Protection against electric shock (i) REPS equipment on the DC side shall be considered as energized, even when the system is disconnected from the AC side. (ii) Warning labels should be displayed at relevant electrical equipment including all junction boxes on the DC side. The DC warning labels of PV equipment on the DC side should comply with requirements of Code 17. (iii) For PV equipment, Class II equipment in accordance with IEC 61140 or equivalent insulation should preferably be adopted on the DC side for protection against electric shock, for example, by the use of class II DC connectors. (iv) For PV equipment installed in building and premises for Categories 2 and 5 Dangerous Goods including those in building and premises for liquid petroleum gas storage and for petrol filling stations, its open-circuit voltage under

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
			standard test conditions ($U_{oc\ STC}$) in accordance with BS EN 60904-3 should not exceed 120V DC. (b) Protection against overload on the DC side (i) DC overcurrent protection devices shall be provided for the circuits on the DC side unless satisfying subparagraphs (ii) and (iii). (ii) Overload protection may be omitted to PV string and PV array cables when the continuous current-carrying capacity of the cable is equal to or greater than 1.25 times short-circuit current under standard test conditions ($I_{sc\ STC}$) in accordance with BS EN 60904-3 at any location. (iii) Overload protection may be omitted to the PV main cable if the continuous current-carrying capacity is equal to or greater than 1.25 times short-circuit current under standard test conditions ($I_{sc\ STC}$) in accordance with BS EN 60904-3 of the PV generator, which is the summation of all the PV string circuits connected under that PV main circuit. (c) Devices for isolation and switching (i) To allow the maintenance of the inverter, means of isolating the inverter from the DC side and AC side shall be provided. The isolation devices shall be lockable and readily accessible for manual operation by the registered electrical worker. (ii) A switch-disconnector or a suitably rated circuit breaker should be provided on the DC side of the inverter. The DC switch-disconnector should be rated for DC operation at the voltage and current maxima calculated for the circuit. (iii) The isolation devices shall completely isolate all live conductors, for example, by the use of double-pole or 4-pole isolators. (iv) Dual power supply warning labels shall be displayed at all electrical equipment with dual power supply sources. The warning label should comply with requirements of Code 17. (d) Fault protection

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

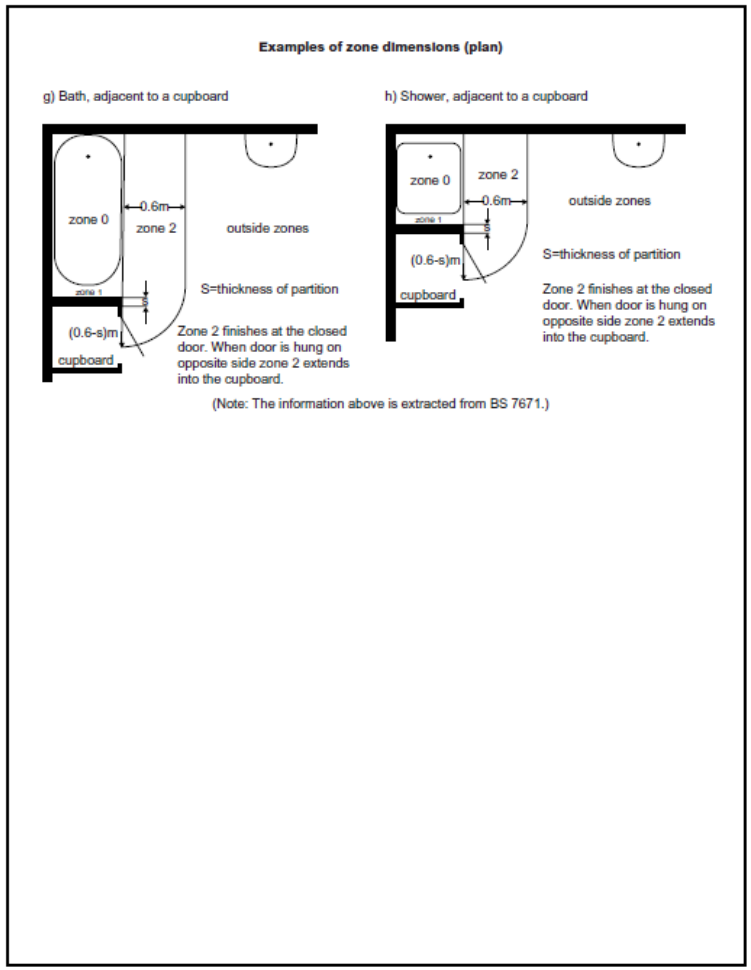
Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
			(i) Fault protection shall be provided for the installation in respect of each source of supply or combination of sources of supply that can operate independently of other sources or combinations of sources. (ii) On the AC side of REPS installation, cables shall be connected to the supply side of the overcurrent protective device for automatic disconnection of circuits supplying current-using equipment. (iii) Where an RCD is used for providing additional protection, the type of RCD shall disconnect all live conductors and be in accordance with the manufacturer's recommendations.
113	Code 26P (4)	-	(4) Inspection, testing and maintenance (a) An owner of the REPS installation should ensure the associated electrical equipment be regularly inspected and maintained in a safe and proper working condition in accordance with the manufacturer's guidelines / instructions and the relevant requirements in the CoP. Notice showing the name and registration number of the registered electrical contractor employed for maintaining the REPS installation shall be displayed at a prominent location. (b) An owner of the REPS installation should display the REPS circuit diagrams at appropriate locations to facilitate maintenance personnel to properly shut down the grid connection arrangement under normal and emergency operations. (c) For REPS installation connected in parallel with the mains supply from an electricity supplier, special attention should be paid to ensure that the REPS installation should be automatically disconnected from the mains supply when the mains supply was tripped. (d) During maintenance, the power generation side, grid connection side, and battery (if applicable) of REPS should be isolated to prevent electric shock to electrical workers. (e) The requirements stated in the checklist for inspection and testing of REPS installations of Code 22 should be followed.
114	Code 26S	-	*New Code 26S Charging Facilities for Electric Vehicles*

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

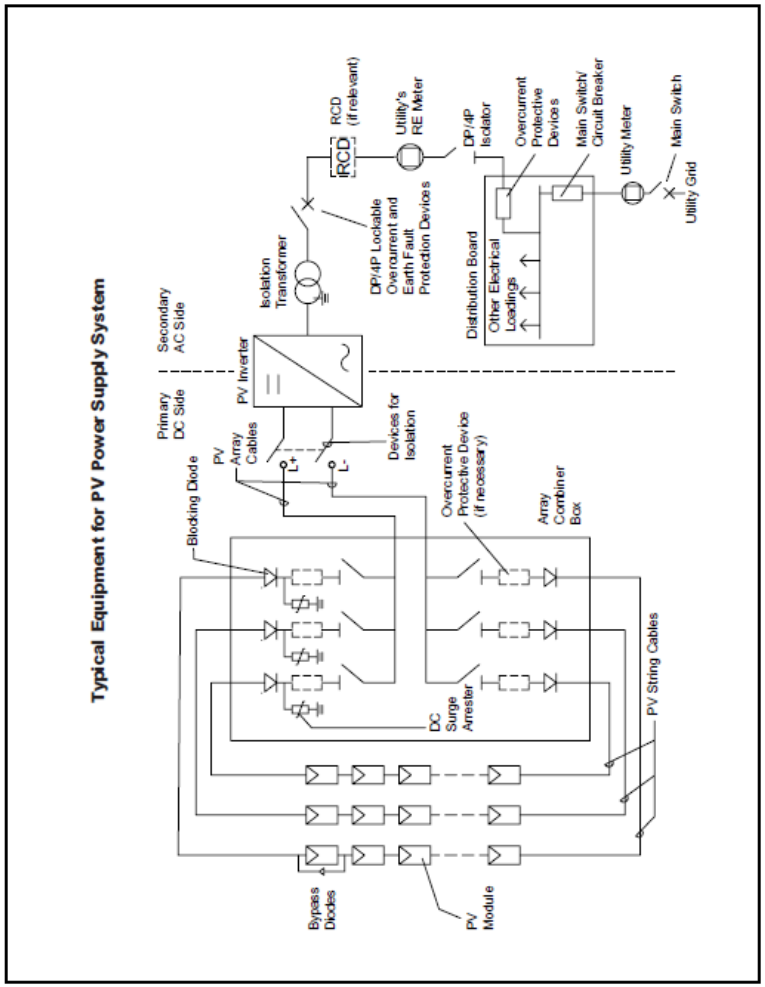
Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
115	Code 26T	-	*New Code 26T Installation for Modular Integrated Construction*
116	Code 26 Figure 26(1)A g) & h) (Page 213)	-	 CODE NO.26 FIGURE NO.26(1)A

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

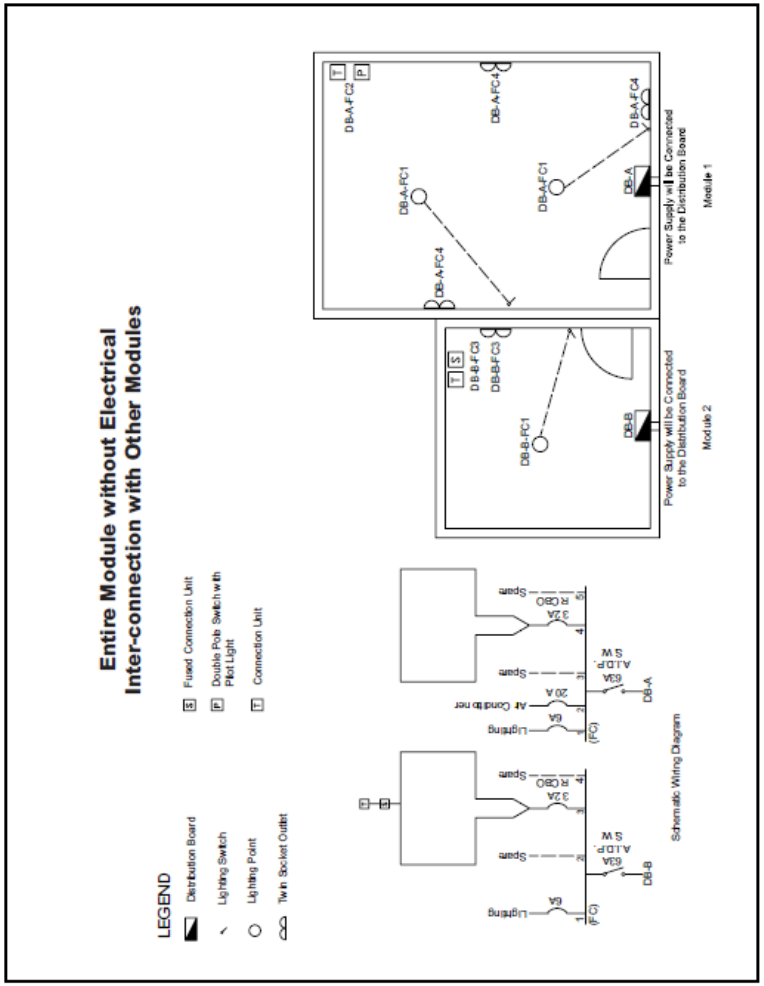
Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
117	Code 26 Figure 26(7)	-	 CODE NO.26 FIGURE NO.26(7)

➢ The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

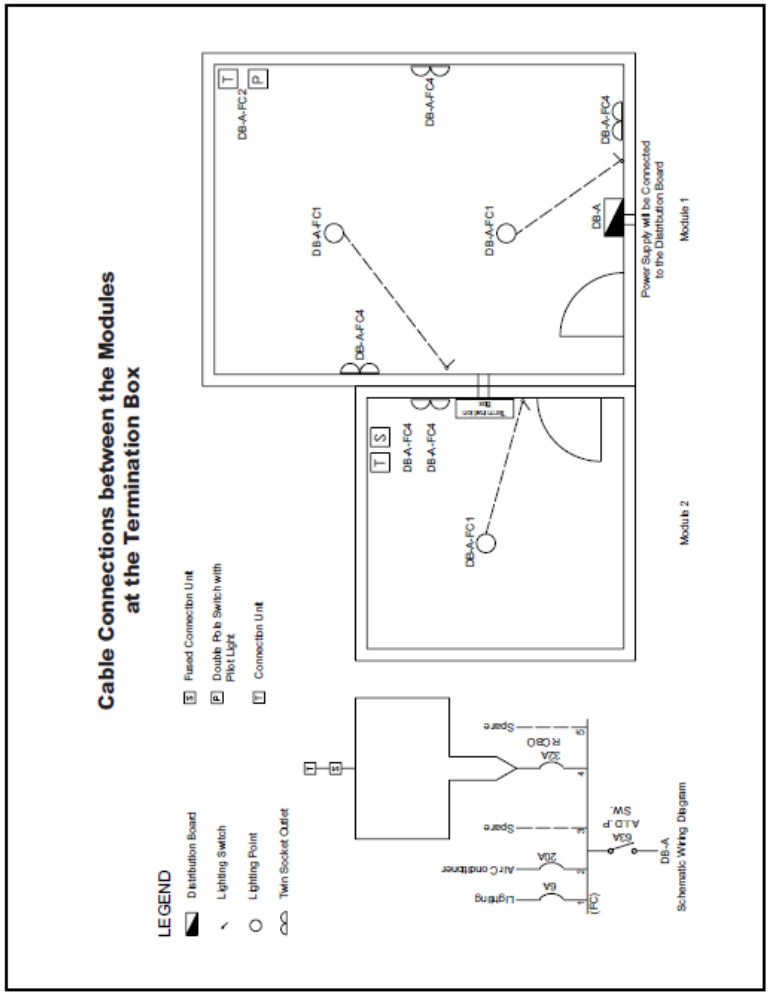
Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
118	Code 26 Figure 26(8)	-	 CODE NO.26 FIGURE NO.26(8)

➢ The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

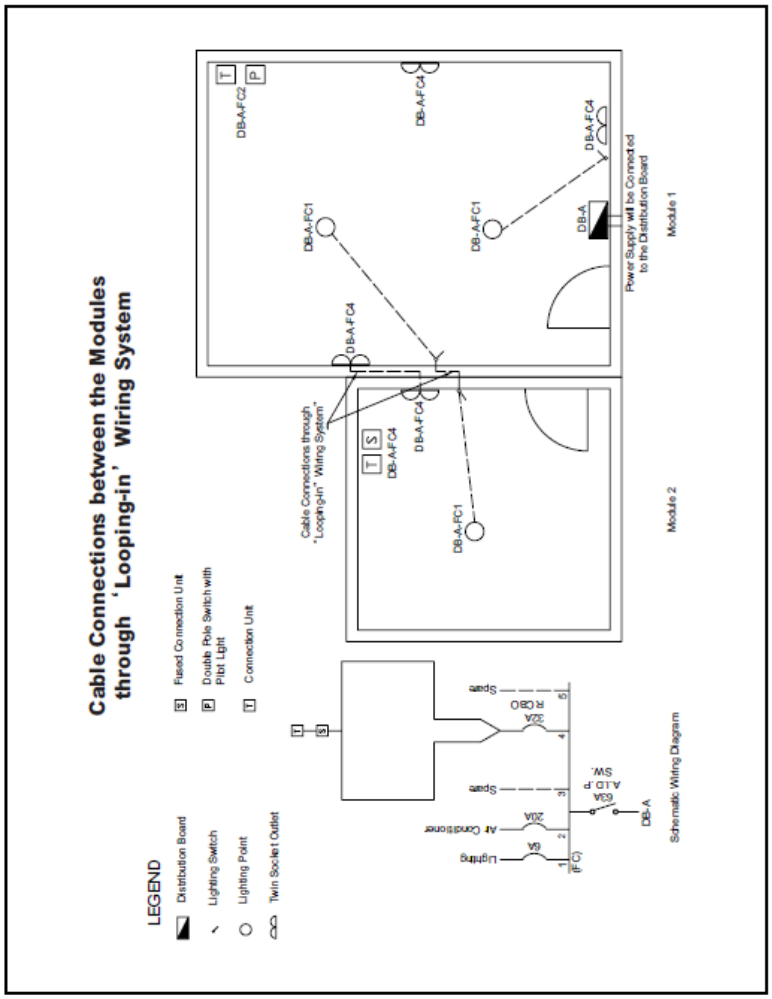
Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
119	Code 26 Figure 26(9)	-	 CODE NO.26 FIGURE NO.26(9)

➢ The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

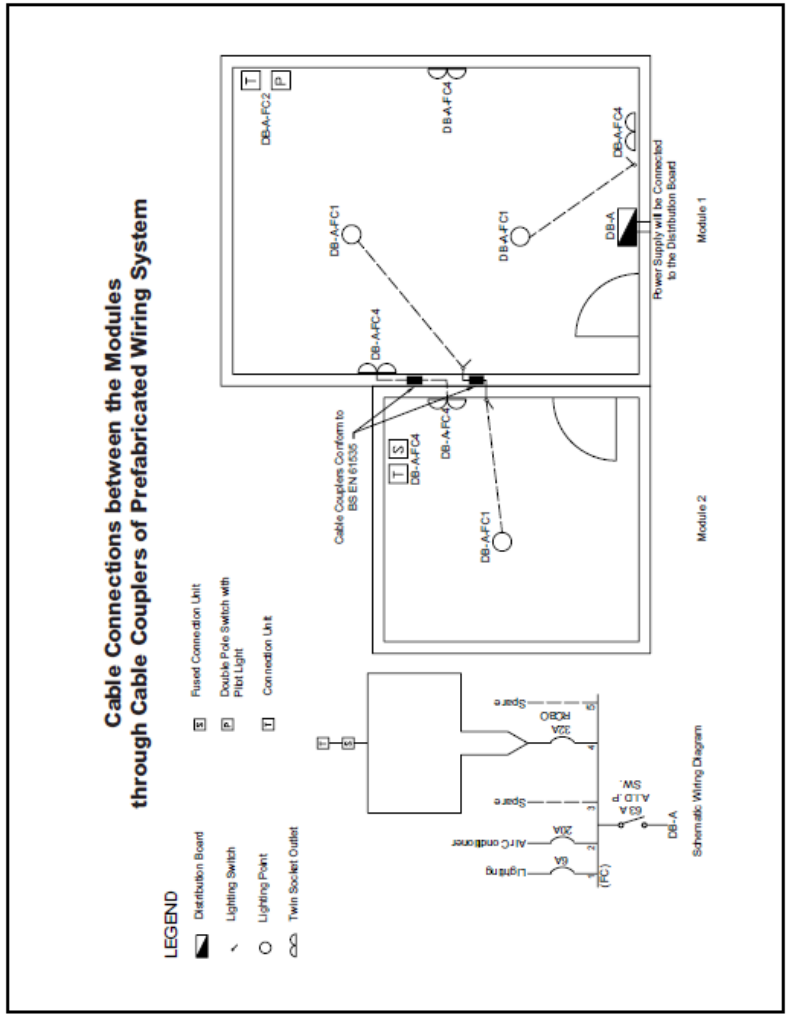
Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
120	Code 26 Figure 26(10)	-	 CODE NO.26 FIGURE NO.26(10)

➢ The table is used <u>for reference only</u>. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
121	Code 26 Figure 26(11)		 CODE NO.26 FIGURE NO.26(11)

- The table is used <u>for reference only</u>. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
122	Appendice Content Page (Page 220)	APPENDICES 1. Prescribed Requirements for 3-pin (non-reversible) 5 ampere and 15 ampere Socket Outlets 2. Prescribed Requirements for 3-pin (non-reversible) 13 ampere Socket Outlets 3. Prescribed Requirements for Protected Type Non-reversible 5 ampere, 15 ampere and 30 ampere Socket Outlets 4. Prescribed Requirements for Industrial Type 16 ampere, 32 ampere, 63 ampere and 125 ampere Socket Outlets with Retaining Devices 9. Performance Monitoring Points System for Registered Electrical Workers / Contractors	APPENDICES 1. (Reserved for Future Uses) 2. (Reserved for Future Uses) 3. (Reserved for Future Uses) 4. (Reserved for Future Uses) 9. (Reserved for Future Uses)
123	Appendix 1 (Page 221)	-	*Deleted*
124	Appendix 2 (Page 229)	-	*Deleted*
125	Appendix 3 (Page 238)	-	*Deleted*
126	Appendix 4 (Page 248)	-	*Deleted*

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

<table>
<tr><th>Item</th><th>Code / Table / Appendix</th><th>2015 Edition</th><th>2020 Edition</th></tr>
<tr><td>127</td><td>Table A5(3)
(Page 265)</td><td>
Table A5(3)
Rating factors for one circuit or one multi-core cable, or for a group of circuits, or a group of multi-core cables, to be used with current-carrying capacities of Table A6(1) to A6(8)
<table>
<tr><th rowspan="2">Item</th><th rowspan="2">Arrangement (cable touching)</th><th colspan="12">Number of circuits or multicore cables</th><th rowspan="2">To be used with current-carrying capacities, Reference Method</th></tr>
<tr><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>12</th><th>16</th><th>20</th></tr>
<tr><td>1.</td><td>Bunched in air, on a surface, embedded or enclosed</td><td>1.00</td><td>0.80</td><td>0.70</td><td>0.65</td><td>0.60</td><td>0.57</td><td>0.54</td><td>0.52</td><td>0.50</td><td>0.45</td><td>0.41</td><td>0.38</td><td>A to F</td></tr>
<tr><td>2.</td><td>Single layer on wall or floor</td><td>1.00</td><td>0.85</td><td>0.79</td><td>0.75</td><td>0.73</td><td>0.72</td><td>0.72</td><td>0.71</td><td>0.70</td><td>0.70</td><td>0.70</td><td>0.70</td><td>C</td></tr>
<tr><td>3.</td><td>Single layer multi-core on a perforated horizontal or vertical cable tray system</td><td>1.00</td><td>0.88</td><td>0.82</td><td>0.77</td><td>0.75</td><td>0.73</td><td>0.73</td><td>0.72</td><td>0.72</td><td>0.72</td><td>0.72</td><td>0.72</td><td>E and F</td></tr>
<tr><td>4.</td><td>Single layer multicore on cable ladder system or cleats, etc.</td><td>1.00</td><td>0.87</td><td>0.82</td><td>0.80</td><td>0.80</td><td>0.79</td><td>0.79</td><td>0.78</td><td>0.78</td><td>0.78</td><td>0.78</td><td>0.78</td><td>E and F</td></tr>
</table>
</td><td>
Table A5(3)
Rating factors for one circuit or one multi-core cable, or for a group of circuits, or a group of multi-core cables, to be used with current-carrying capacities of Table A6(1) to A6(8)
<table>
<tr><th rowspan="2">Item</th><th rowspan="2">Arrangement (cable touching)</th><th colspan="12">Number of circuits or multicore cables</th><th rowspan="2">To be used with current-carrying capacities, Reference Method</th></tr>
<tr><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>12</th><th>16</th><th>20</th></tr>
<tr><td>1.</td><td>Bunched in air, on a surface, embedded or enclosed</td><td>1.00</td><td>0.80</td><td>0.70</td><td>0.65</td><td>0.60</td><td>0.57</td><td>0.54</td><td>0.52</td><td>0.50</td><td>0.45</td><td>0.41</td><td>0.38</td><td>A to F</td></tr>
<tr><td>2.</td><td>Single layer on wall or floor</td><td>1.00</td><td>0.85</td><td>0.79</td><td>0.75</td><td>0.73</td><td>0.72</td><td>0.72</td><td>0.71</td><td>0.70</td><td>0.70</td><td>0.70</td><td>0.70</td><td>C</td></tr>
<tr><td>3.</td><td>Single layer multi-core on a perforated horizontal or vertical cable tray system</td><td>1.00</td><td>0.88</td><td>0.82</td><td>0.77</td><td>0.75</td><td>0.73</td><td>0.73</td><td>0.72</td><td>0.72</td><td>0.72</td><td>0.72</td><td>0.72</td><td>E</td></tr>
<tr><td>4.</td><td>Single layer multicore on cable ladder system or cleats, etc.</td><td>1.00</td><td>0.87</td><td>0.82</td><td>0.80</td><td>0.80</td><td>0.79</td><td>0.79</td><td>0.78</td><td>0.78</td><td>0.78</td><td>0.78</td><td>0.78</td><td>E</td></tr>
</table>
</td></tr>
<tr><td>128</td><td>Appendix 5(3)
(Page 266)</td><td>(3) Correction factors for cables enclosed in thermal insulating material

For a cable installed in a thermally insulated wall or above a thermally insulated ceiling, the cable being in contact with a thermally conductive surface on one side, current carrying capacities are tabulated in Appendix 6, Method 4 of Appendix 7 being the appropriate Reference Method.

For a single cable likely to be totally surrounded by thermally</td><td>(3) Correction factors for cables enclosed in thermal insulating material

For a cable installed in a thermally insulated wall or above a thermally insulated ceiling, the cable being in contact with a thermally conductive surface on one side, current carrying capacities are tabulated in Appendix 6, Method A of Appendix 7 being the appropriate Reference Method.</td></tr>
</table>

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

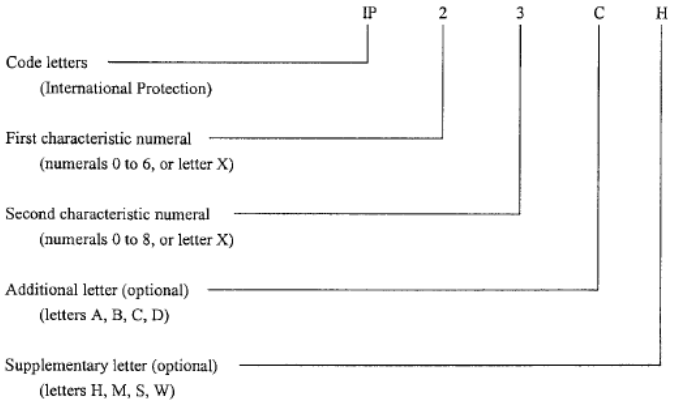
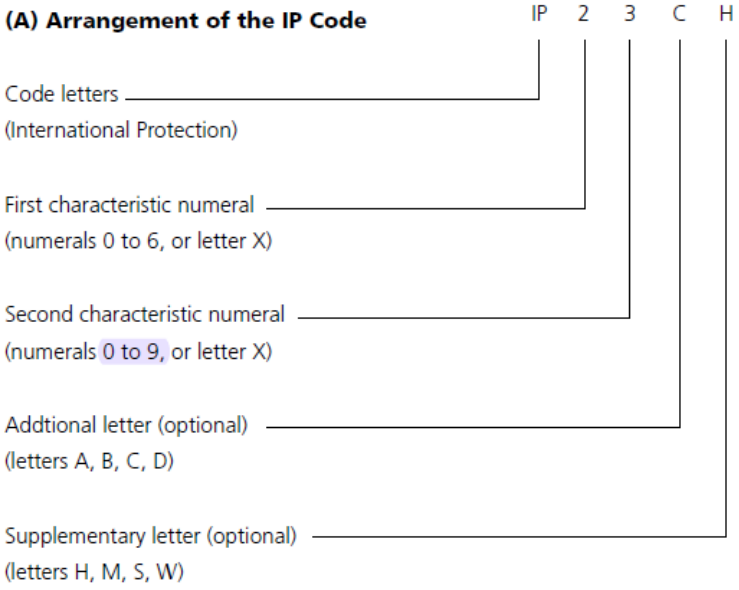
Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
		insulating material over a length of more than 0.5m, the current carrying capacity shall be taken, in the absence of more precise information, as 0.5 times the current carrying capacity for that cable clipped direct to a surface and open (Reference Method 1 of Appendix 7). Where a cable is to be totally surrounded by thermal insulation for less than 0.5 m the current carrying capacity of the cable shall be reduced appropriately depending on the size of cable, length in insulation and thermal properties of the insulation. The derating factors in Table A5(4) are appropriate to conductor size up to 10 mm2 in thermal insulation having a thermal conductivity greater than 0.04 W/K.m.	For a single cable likely to be totally surrounded by thermally insulating material over a length of more than 0.5m, the current carrying capacity shall be taken, in the absence of more precise information, as 0.5 times the current carrying capacity for that cable clipped direct to a surface and open (Reference Method C of Appendix 7). Where a cable is to be totally surrounded by thermal insulation for less than 0.5m the current carrying capacity of the cable shall be reduced appropriately depending on the size of cable, length in insulation and thermal properties of the insulation. The derating factors in Table A5(4) are appropriate to conductor size up to 10mm2 in thermal insulation having a thermal conductivity greater than 0.04 W/K.m. For other size of cable and thermal properties of the insulation, advice of the manufacturer of the cable should be sought.
129	Appendix 6(1)(b) (Page 268)	(b) The values of current tabulated represent current carrying capacities where no correction factor is applied. Under individual installation conditions, appropriate correction factors (see Appendix 5) for ambient temperature, grouping and thermal insulation etc. should be applied as multipliers to the tabulated values.	(b) The values of current tabulated represent current carrying capacities where no rating factor is applied. Under individual installation conditions, appropriate rating factors (see Appendix 5) for ambient temperature, grouping and thermal insulation etc. should be applied as multipliers to the tabulated values. For direct buried cables and cables in buried ducts, the rating factors given in Appendix 4 of BS 7671 should be taken into account.
130	Appendix 6(2)(b) (Page 268)	(b) For cables having conductors cross-sectional area of 16 mm2 or less, inductance can be ignored and only the resistive component (mV/A/m), values are tabulated. For cables having conductors cross-sectional area greater than 16 mm2, the impedance values are given as (mV/A/m)z, together with the resistive component (mV/A/m)r and the reactive component (mV/A/m)x.	(b) For cables having conductors cross-sectional area of 16 mm2 or less, inductance can be ignored and only the resistive component (mV/A/m), values are tabulated. For cables having conductors cross-sectional area greater than 16 mm2, the impedance values are given as (mV/A/m)z, together with the resistive component (mV/A/m)r and the reactive component (mV/A/m)x. Alternatively, the voltage drop can be calculated, with the correction of operating temperature and load power factor, using the formula given in item 6 of Appendix 4 of BS 7671.

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
131	Appendix 9 (Page 298)	-	*Deleted*
132	Appendix 10(A) (Page 299)	**(A) Arrangement of the IP Code**  Where a characteristic numeral is not required to be specified, it shall be replaced by the letter "X" ("XX" if both numerals are omitted).	**Appendix 10** **Degree of Protection Provided by Enclosure (IP Code)** **(A) Arrangement of the IP Code**  Where a characteristic numeral is not required to be specified, it shall be replaced by the letter "X" ("XX" if both numerals are omitted).

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

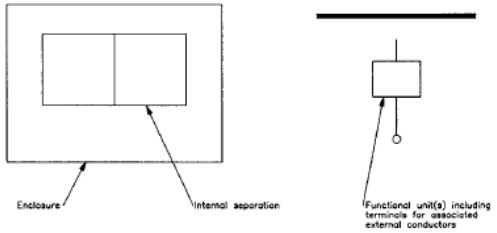
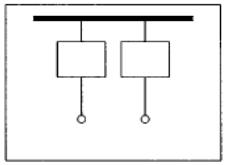
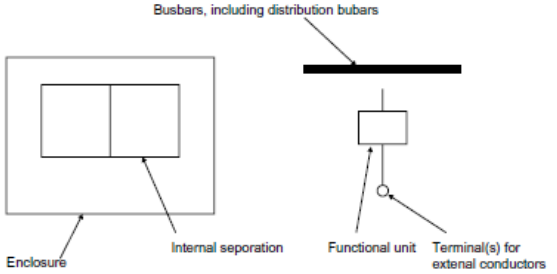
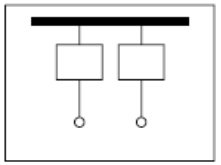
Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
133	Appendix 10(B) (Page 300)	**(B) Elements of the IP Code and their meanings** A brief description of the IP Code elements is given in the following chart. Element / Numerals or letters / Meaning for the protection of equipment / Meaning for the protection of persons Code letters / IP / - / - First characteristic numeral: 0 / 1 / 2 / 3 / 4 / 5 / 6 — Against ingress of solid foreign objects (non-protected) / ≥ 50 mm diameter / ≥ 12.5 mm diameter / ≥ 2.5 mm diameter / ≥ 1.0 mm diameter / dust- protected / dust-tight — Against access to hazardous parts with (non-protected) / back of hand / finger / tool / wire / wire / wire Second characteristic numeral: 0 / 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 — Against ingress of water with harmful effects (non-protected) / vertically dripping / dripping (15° tilted) / spraying / splashing / jetting / powerful jetting / temporary immersion / continuous immersion — - Additional letter (optional): A / B / C / D — - — Against access to hazardous parts with: back of hand / finger / tool / wire Supplementary letter (optional): H / M / S / W — Supplementary information specific to: High voltage apparatus / Motion during water test / Stationary during water test / Weather conditions — -	**(B) Elements of the IP Code and their meanings** A brief description of the IP Code elements is given in the following chart Element / Numerals or letters / Meanings for the protection of equipment / Meanings for the protection of persons Code letters / IP / - / - First characteristic numeral: 0 / 1 / 2 / 3 / 4 / 5 / 6 — Against ingress of solid foreign objects (non-protected) / ⩾ 50mm diameter / ⩾ 12.5mm diameter / ⩾ 2.5mm diameter / ⩾ 1.0mm diameter / dust-protected / dust-tight — Against access to hazzardous parts with (non-protected) / back of hand / finger / tool / wire / wire / wire Second charactistic numeral: 0 / 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 — Against ingress of water with harmful effects (non-protected) / vertically dripping / dripping (15° telted) / spraying / splashing / jetting / powerful jetting / temporary immersion / continuous immersion / High pressure and temperature water jet — - Additional letter (optional): A / B / C / D — - — Against access to hazzardous parts with: back of hand / finger / tool / wire Supplementary letter (option): H / M / S / W — Supplementary information specific to: High voltage apparatus / Motion during water test / Stationary during water test / Weather conditions — - Note: The information above is extracted from IEC 60529 ed.2.2 "Copyright©2013 IEC Geneva, Switzerland.www.iec.ch".

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
134	Appendix 11 Figure A11(1) & (2) (Page 301)	**Forms of Internal Separations for Switchgear Assemblies** Symbols Busbars, including distribution busbars  Figure A11(1) – Symbols used Form 1 No internal separation  Form 2 Separation of busbars from the functional units  Figure A11(2) – Forms 1 and 2	**Forms of Internal Separations for Switchgear Assemblies** Symbols  Figure A11(1) - Symbols used Form 1 No internal separation  Form 2 Separation of busbars from all functional units  Figure A11(2) — Forms 1 and 2

- The table is used <u>for reference only</u>. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

135	Appendix 11 Figure A11(3) (Page 302)	Form 3 Separation of busbars from the functional units + Separation of functional units from one another + Separation of terminals from functional units  Form 3a: Terminals not separated from busbars Form 3b: Terminals separated from busbars Form 4 Separation of busbars from the functional units + Separation of functional units from one another + Separation of terminals from functional units  Form 4a: Terminals in same compartment as associated functional unit Form 4b: Terminals separated from busbars as associated functional unit Figure A11(3) – Forms 3 and 4	Date: 31st December 2020 Form 3 Separation of busbars from all functional units + Separation of all functional units from one another + Separation of terminals for external conductors and external conductors from the functional units, but not from the terminals of other functional units  Form 3a : Terminals not separated from busbars IEC 1716/11 Form 3b : Terminals and external conductors separated from busbars IEC 1714/11 Form 4 Separation of busbars from all functional units + Separation of all functional units from one another + Separation of terminals for external conductors associated with a functional unit from the terminals of any other functional unit and the busbars + Separation of the external conductors from the busbars + Separation of the external conductors associated with a functional unit from other functional units and their terminals + External conductors need not be separated from each other  Form 4a : Terminals in same compartment as associated functional unit IEC 1717/11 Form 4b : Terminals not in same compartment as associated functional unit IEC 1718/11 Figure A11(3) — Forms 3 and 4 Note: The information above is extracted from IEC 61439-2 ed.2.0 "Copyright©2011 IEC Geneva, Switzerland.www.iec.ch".

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
136	Appendix 13(A) (Page 304)	**A) Schedule of Test Results for Electrical Wiring (Sample)** Distribution Board Location & No. : Testing Instrument : Circuit Description / Protective Device: Type, Rating (A) / Wiring Conductor: Live (mm²), cpc (mm²) / Test Result: Continuity: Protective conductor (Ω), Ring final circuit (Ω); Insulation Resistance: L-L (MΩ), L-E (MΩ); Polarity; Earth Loop Impedance (Zs) (Ω); Functional Test: RCD (ms), Other / Remarks Tested By: Date: Declaration: The above information is true to the best of my knowledge and belief. I understand that I may be liable to criminal prosecution if I knowingly provide false information. Note: This sample test record form may be downloaded from EMSD's homepage at www.emsd.gov.hk (path: Protecting Public Safety ► Electricity ► Publications).	**A) Schedule of Teat Results for Electrical Wiring (Sample)** Distribution Board Location & No. : Testing Instrument: Circuit Description / Protective Device: Type, Rating (A) / Wiring Conductor: Live (mm²), cpc (mm²) / Test Result: Continuity: Protective conductor (Ω), Ring final circuit (Ω); Insulation Resistance: L-L (MΩ), L-E (MΩ); Polarity; Earth Loop Impedance (Zs) (Ω); Functional Test: RCD (ms), Other / Remarks Tested By: Date: Declaration: The above information is true to the best of my knowledge and belief. I understand that I may be liable to criminal prosecution if I knowingly provide false information. Note: This sample test record form may be download from EMSD's homepage at www.emsd.gov.hk (path: Protecting Public Safety ► Electricity ► Publications). L represents live conductors, including phase conductors and neutral conductors.

➢ The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.

Summary of Major Revisions

Code of Practice for the Electricity (Wiring) Regulations 2020 Edition (English Version)

Item	Code / Table / Appendix	2015 Edition	2020 Edition
137	Appendix 13 Checklist No. 1 (Page 305)	Checklist No. 1 — Items For New L.V. Installation or Items For Periodic Testing of L.V. Installations connected before 1.1.85	*Revised Checklist No. 1 — Items For New L.V. Installation or Items For Periodic Testing of L.V. Installations*
138	Appendix 13 Checklist No. 2 (Page 309)	Checklist No. 2 — Additional Items For New L.V. Installation or Items For Periodic Testing of L.V. Installations connected on or after 1.1.85 but before 1.6.92	*Revised Checklist No. 2 — Additional Items For New L.V. Installation*
139	Appendix 13 Checklist No. 3 (Page 310)	Checklist No. 3 — Additional Items For New L.V. Installation or Items For Periodic Testing of L.V. Installations connected on or after 1.6.92	*Revised Checklist No. 3 — Items for Renewable Energy Power System (REPS) Installations*
140	Appendix 14 (Page 325)	-	*Updated for contents of revised and new Codes.*
141	Throughout the Codes	a.c. , d.c. , Low Voltage, High Voltage	AC, DC, LV, HV
142	Index	-	*Updated for contents of revised and new Codes.*

- The table is used **for reference only**. It does not reduce, limit or replace any legal obligations upon any person to comply with any statutory duties under relevant legislation.