

What's New December 2018

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Content Common to CAWS and BG 56 Based Specifications

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A full record of the content revisions can be obtained within the report that is produced when you run the update routine on your user specifications.

Detailed PDF guidance documents can be found by clicking on the 'Sustainability' or 'Technical Design Guides' icons in the 'Guidance' toolbar.

Unless stated otherwise, section or clause guidance is accessed via the right-hand window.

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Section 1	Summary
Detailed Technical Guidance	<p>New or enhanced existing guidance:</p> <ul style="list-style-type: none"> • New PDF document giving an overview of changes to BS 7671:2018 (IET Wiring Regulations 18th Edition) • Detailed commentary on which NES clauses required updates in relation to the main changes published in BS 7671:2018 <p style="text-align: right;"><i>See Section 2 for details</i></p>
Work Section Updates	<p>Key points:</p> <ul style="list-style-type: none"> • Many sections, clauses and schedules updated in line with BS 7671:2018 • Cables and wiring clauses, including prefabricated wiring systems, audited in accordance with current standards and reference documents • Preliminaries sections updated in line with BSRIA BG 6, A Design Framework for Building Services - mainly drawing definition changes • Clauses in catering equipment and kitchen ventilation sections enhanced to permit specification to BS EN 16282 • Below ground drainage and sewage pumping sections updated with various standards • Clauses associated with liquid fuel firing, referencing BS 5410-2, updated • CHP, standby generation, PV & wind generation sections updated to reflect the replacement of Energy Networks Association (ENA) Engineering Recommendations G83 and G59, with G98 and G99 respectively • Various sections updated to take into account Department of Health HTM 06-01:2017 • Updates made to various sections in regards to plastic pipes <p style="text-align: right;"><i>See Section 2 for further details and Section 3 for details of schedules</i></p>
Standards and Regulations Updates (only significant standards listed here)	<p>Some significant documents covered by the update include:</p> <ul style="list-style-type: none"> • Health Technical Memorandum 06-01 Electrical services supply and distribution, 2017 Edition <p>Some significant standards covered by the update include:</p> <ul style="list-style-type: none"> • BS 7671:2018 IET Wiring Regulations • BS EN 16282 (components for ventilation in commercial kitchens) • BS EN 16941-1:2018 for rainwater re-use (supersedes BS 8515) • BS 5410-2:2018 - liquid fuel firing - non-domestic • BS EN 12102-1:2017 determination of sound power level of AC plant • Withdrawal of BS EN 13779 on ventilation of non-residential buildings <p style="text-align: right;"><i>See Section 4 for details of all changes to reference documents</i></p>

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Section 2 Details of Work Section Updates & Audits

Refer to separate 'CAWS - BG 56 NES Master Content Reference Document' for details of the corresponding BG 56 part/section to the following CAWS section references.

BS 7671:2018 IET Wiring Regulations 18th Edition

The December 2018 release contains changes to implement BS 7671:2018, which should be used for all new projects being designed from 1 January 2019. The following table provides a commentary on which Clauses were required to be updated in relation to the main changes published in the standard.

Colour-coding used in this table:



No new changes in NES



New changes in NES

Commentary on update from BS 7671	Notes on NES Updates in December 2018
Part 1 Scope, object and fundamental principles	
Regulation 133.1.3 (Selection of equipment) has been modified and now requires certain usage of equipment to be recorded on the appropriate electrical certification specified in Part 6.	The following clauses have been updated to require accompanying documentation to be provided with electrical installation certification: <ul style="list-style-type: none"> • Y81:2140 and 2150 • V90:600.120 • V91:900.900 • V92:900.900 • B20:1300.500
Part 2 Definitions	
Definitions have been expanded and modified.	No impact on NES requirements.
Chapter 41 Protection against electric shock	
Section 411 contains a number of significant changes. Some of the main ones are mentioned below:	
Metallic pipes entering the building having an insulating section at their point of entry need not be connected to the protective equipotential bonding (Regulation 411.3.1.2).	No impact on NES requirements.
The maximum disconnection times stated in Table 41.1 now apply to final circuits rated up to 63 A with one or more socket-outlet(s) and final circuits rated up to 32 A supplying only fixed connected current-using equipment (Regulation 411.3.2.2).	No impact on NES requirements.
Regulation 411.3.3 has been revised and now applies to socket-outlets with a rated current not exceeding 32 A. There is an exception to omit RCD protection where, other than for a dwelling, a documented risk assessment determines that RCD protection is not necessary.	No impact on NES requirements.
A new Regulation 411.3.4 requires that, within domestic (household) premises, additional protection by an RCD with a rated residual operating current not exceeding 30 mA shall be provided for AC final circuits supplying luminaires.	No impact on NES requirements.

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New changes in NES

Commentary on update from BS 7671	Notes on NES Updates in December 2018
Regulation 411.4.3 has an addition that states that no switching or isolating device shall be inserted in a PEN conductor.	No impact on NES requirements.
Regulations 411.4.4 and 411.4.5 have been redrafted.	No impact on NES requirements.
The regulations concerning IT systems (411.6) have been reorganized. Regulations 411.6.3.1 and 411.6.3.2 have been deleted and 411.6.4 redrafted and a new Regulation 411.6.5 inserted.	No impact on NES requirements.
A new Regulation group (419) has been inserted where automatic disconnection according to Regulation 411.3.2 is not feasible, such as electronic equipment with limited short-circuit current.	No impact on NES requirements.
Chapter 42 Protection against thermal effects	
A new Regulation 421.1.7 has been introduced recommending the installation of arc fault detection devices (AFDDs) to mitigate the risk of fire in AC final circuits of a fixed installation due to the effects of arc fault currents.	<p>The following Clauses have been added to facilitate the specification of arc fault detection devices (AFDDs) in accordance with BS 7671:2018:</p> <ul style="list-style-type: none"> • Y71.2235A ARC FAULT DETECTION DEVICES • Y71.2235B ARC FAULT DETECTION DEVICES WITH OVERCURRENT PROTECTION • Y71.2235C ARC FAULT DETECTION DEVICES WITH RESIDUAL CURRENT PROTECTION • Y71.2235D ARC FAULT DETECTION DEVICES WITH OVERCURRENT AND RESIDUAL CURRENT PROTECTION <p>AFDDs / AFDD functions for combined devices have been included in the following Clauses:</p> <ul style="list-style-type: none"> • Y71.2230# and 2240# • Part 2 Clause 271.190 which has been retitled MINIATURE PROTECTION DEVICES INCORPORATING SWITCHING OR ISOLATION FUNCTIONS FOR DISTRIBUTION BOARDS AND CONSUMER UNITS • V90:500.020 and 500.030 • B20:800.502 and 800.503.
Regulation 422.2.1 has been redrafted. Reference to the external influences classifications BD2, BD3 and BD4 (see Appendix 5 of BS 7671) has been deleted. A note has been added stating that cables need to satisfy the requirements of the Construction Products Regulation (CPR) in respect of their reaction to fire and making reference to Appendix 2, item 17. Requirements have also been included for cables that are supplying safety circuits.	<p>The following Clauses have been updated to incorporate the changes to Regulations 422.2.1, 422.3.4, 422.5, and 527.1.3, in BS 7671:2018, taking account where appropriate of the minimum fire classification requirements of BS 6701:2016+A1:2017:</p> <ul style="list-style-type: none"> • Y61.1010, 2010#, 2010A, 2010B, 2010C, 2010D, 2010E, 2020#; 2020A; 2020B, 2020C, 2020D, 2020E, 2020F, 2020G, 2020H, 2020I, 2020J, 2020K, 2020M, 2020N,

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Commentary on update from BS 7671	Notes on NES Updates in December 2018
	<p>2050#, 2050A, 2050B, 2050C, 2050G, 2050H, 2070#, 2070B, 2075, 2080#, 2080A, 2080B, 2090#, 2090A, 2100#, 2100A, 2100B, 2100C, 2100D, 2110#</p> <ul style="list-style-type: none"> • V90:300.100, 300.110, 300.130 • V91:900.360, 900.370, 900.390, 900.400, 900.410, 900.420, 900.430 • V92:900.360, 900.370, 900.390, 900.400, 900.410, 900.420, 900.430 • B20:800.306, 800.307, 800.309, 800.310, 810.136, 810.137, 810.139, 810.140, 820.036, 820.037, 820.039, 820.040, 820.045, 830.046, 830.047, 830.049, 830.050, 840.026, 840.027, 840.029, 840.030, 840.035, 850.046, 850.047, 850.049, 850.050, 850.055, 850.057 <p>Whilst BS 6701 includes for minimum fire performance of cables using the EuroClass rating, BS 7671 does not. Therefore, for the above Clauses, minimum EuroClass fire performance codes for cables that are within the scope of BS 7671, but not BS 6701, have been derived from the British Cables Association Guidance to Specifiers for the Construction Products Regulation (CPR) and cables Ed 2, see www.bcauk.org/download_file/229/198</p> <p>A column for fire performance requirement has been added to the following Schedules for specification of cables:</p> <ul style="list-style-type: none"> • Cables Technical Details by Application • Main and Sub-Main Cables Design Data • Structured Cabling Copper Patch Cords • Structured Cabling Fibre Patch Cords
<p>Chapter 44 Protection against voltage disturbances and electromagnetic disturbances</p> <p>Section 443, which deals with protection against overvoltages of atmospheric origin or due to switching, has been redrafted. The AQ criteria (conditions of external influence for lightning) for determining if protection against transient overvoltages is needed are no longer included. Instead, protection against transient overvoltages has to be provided where the consequence caused by overvoltage (see Regulation 443.4)</p> <p>(a) could result in serious injury to, or loss of, human life, or</p> <p>(b) could result in interruption of public services/or damage to and cultural heritage, or</p>	<p>Work Section W52 Clauses 300.010, 300.011, 300.015, 320.010, 320.011, and 320.015 have been updated to include BS 7671, as relevant to the changes in Sections 443 and 534 of BS 7671:2018.</p>

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Commentary on update from BS 7671	Notes on NES Updates in December 2018
<p>(c) could result in interruption of commercial or industrial activity, or (d) could affect a large number of co-located individuals. For all other cases, a risk assessment has to be performed in order to determine if protection against transient overvoltage is required. There is an exception not to provide protection for single dwelling units in certain situations.</p>	
<p>Chapter 46 Isolation and switching</p>	
<p>A new Chapter 46 has been introduced. This deals with non-automatic local and remote isolation and switching measures for the prevention or removal of dangers associated with electrical installations or electrically powered equipment. Also, switching for the control of circuits or equipment. Where electrically powered equipment is within the scope of BS EN 60204, only the requirements of that standard apply.</p>	<p>No impact on NES requirements.</p>
<p>Chapter 52 Selection and erection of wiring systems</p>	
<p>Regulation 521.10.202, which gives requirements for the methods of support of wiring systems, has replaced Regulation 521.11.201. This is a significant change. Regulation 521.10.202 requires cables to be adequately supported against their premature collapse in the event of a fire and applies throughout the installation, not just in escape routes as previously.</p>	<p>The following Clauses, relating to cable supports, containment and cable/containment installation, have been updated to incorporate the requirements of Regulation 521.10.202 of BS 7671:2018 (18th Edition of the IET Wiring Regulations), which states that all wiring systems shall be supported such that they will not be liable to collapse in the event of a fire:</p> <ul style="list-style-type: none"> • Y61.4010, 4020, 4030, 4030A, 4040, 4090#, 4090A, 4100, 4110#, 4110A, 4130#, 4130A, 4140, 4200#, 4200A • Y63.2010#, 2010A, 2020#, 2020A, 2020B, 2025#, 2025A, 2025B, 2025D, 2030#, 3010, 3020#, 3020A • B20:800.301, 800.302, 800.303, 800.304, 800.305, 800.314, 800.402, 800.408 • V90:300.010, 300.020, 300.030, 300.040, 300.152, 300.180, 300.190, 400.020, 400.065, 400.090, 400.170 • V91:900.300, 900.310, 900.320, 900.330, 900.450, 900.470, 900.650, 900.710, 900.790, 900.800 • V92:900.300, 900.310, 900.320, 900.330, 900.450, 900.470, 900.650, 900.710, 900.790, 900.800

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Commentary on update from BS 7671	Notes on NES Updates in December 2018
<p>Regulation 527.1.3 has also been modified, and a note added stating that cables also need to satisfy the requirements of the Construction Products Regulation (CPR) in respect of their reaction to fire.</p>	<p>See notes for Regulation 422.2.1 above.</p>
<p>Chapter 53 Protection, isolation, switching, control and monitoring</p>	
<p>This chapter has been completely revised and deals with general requirements for protection, isolation, switching, control and monitoring and with the requirements for selection and erection of the devices provided to fulfil such functions.</p>	<p>The following clauses have been updated to include co-ordination requirements of BS 7671:2018:</p> <ul style="list-style-type: none"> • Y71.1010#, 2010#, 2010A, 2010B, 2010C, 2010D, 2210#, 2210A, 2220# and 2220A • V90:500.020, 500.030 • B20:800.502, 800.503 <p>In the above, requirements have been included for co-ordination and integration of switchgear and controlgear assemblies in accordance with regulations 536.4.5, and 536.4.201 to 536.4.203, of BS 7671:2018.</p> <p>Guidance has been updated to reflect Chapter 53 of BS 7671:2018, in the Work Sections V20, V22, V90, and also in Y71.1010#.</p>
<p>Section 534 Devices for protection against overvoltage</p>	
<p>This section focuses mainly on the requirements for the selection and erection of surge protection devices (SPDs) for protection against transient overvoltages where required by Section 443, the BS EN 62305 series, or as otherwise stated. Section 534 has been completely revised. The most significant technical change refers to the selection requirements for the voltage protection level.</p>	<p>See notes for Section 443 above.</p>
<p>Chapter 54 Earthing arrangements and protective conductors</p>	
<p>Two new regulations (542.2.3 and 542.2.8) have been introduced concerning earth electrodes.</p>	<p>The following Clauses have been updated accordingly:</p> <ul style="list-style-type: none"> • Y80.2040#, 2040A, 2040B, 2040C, 2040D and 2040E • Part 2 Clause 280.030 • B20:800.030 • V90:500.270 <p>Reference has been made where necessary in the above to IET Guidance Note 5 <i>Protection against electric shock</i> for the design of earth electrodes intended to minimise touch voltage in the event of a broken PEN conductor in the supply network.</p>

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Commentary on update from BS 7671	Notes on NES Updates in December 2018
Chapter 55 Other equipment	
Regulation 550.1 introduces a new scope.	No impact on NES requirements.
New Regulation 559.10 refers to ground-recessed luminaires, the selection and erection of which shall take account of the guidance given in Table A.1 of BS EN 60598-2-13.	BS 7671:2018 requirements for ground-recessed luminaires have been included in the following Clauses: <ul style="list-style-type: none"> • Y73.2010# and 2010A. • Part 2 Clause 273.100 • Work Section V90 Clauses 500.060 and 600.010 • Work Section B20 Clauses 500.060 and 800.601.
Part 6 Inspection and testing	
Part 6 has been completely restructured, including the regulation numbering to align with the CENELEC standard. Chapters 61, 62 and 63 have been deleted and their content now forms two new Chapters 64 and 65.	The following Clauses have been updated to reflect 18 th Edition changes in inspection, testing and certification, including changes in terminology used: <ul style="list-style-type: none"> • Y81.1010, 2020#, 2020A, 2030#, 2030A, 2040#, 2040A, 2050, 2060#, 2070, 2140, 2150, 2160, 2170 • Part 2 Clauses 281.020 and 281.030 • V90:600.120 • V91:900.900 • V92:900.900 • B20:1300.500
Section 704 Construction and demolition site installations	
This section contains a number of small changes, including requirements for external influences (Regulation 704.512.2), and a modification to Regulation 704.410.3.6 to include the non-use of the protective measure of electrical separation.	No impact on NES requirements.
Section 708 Electrical installations in caravan/camping parks and similar locations	
This section contains a number of changes including requirements for socket-outlets, RCD protection, and operational conditions and external influences.	No impact on NES requirements.
Section 710 Medical locations	
This section contains a number of small changes including the removal of Table 710, and changes to Regulations 710.415.2.1 to 710.415.2.3 concerning equipotential bonding. In addition, a new Regulation 710.421.1.201 states requirements regarding the installation of AFDDs.	Most of the 18 th Edition updates were addressed in Work Section V33 Medical IT Power Supplies, which was included in the March 2018 NES release. <p>Minor changes have been made to:</p> <ul style="list-style-type: none"> • V33:300.010 to state that AFDDs and RCDs are not required for Medical IT systems in Group 1 and Group 2 locations • V33:310.030, which has been updated to permit the specification of touch voltages

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New changes in NES

Commentary on update from BS 7671	Notes on NES Updates in December 2018
	<p>below AC 25 V / DC 60 V should this be required for a particular project</p> <ul style="list-style-type: none"> W51:320.200, which has been updated to reflect the touch voltage and supplementary equipotential bonding resistances in Section 710 of BS 7671:2018
Section 715 Extra-low voltage lighting installations	
<p>This section contains only minor changes including modifications to Regulation 715.524.201.</p>	<p>No impact on NES requirements.</p>
Section 721 Electrical installations in caravans and motor caravans	
<p>This section contains a number of changes to the requirements concerning electrical separation, RCDs, proximity to non-electrical services and protective bonding conductors.</p>	<p>No impact on NES requirements.</p>
Section 722 Electric vehicle charging installations	
<p>This section contains significant changes to Regulation 722.411.4.1 concerning the use of a protective multiple earthing (PME, i.e. TN-C-S earthing arrangement) supply. The exception concerning reasonably practicable has been deleted. Changes have also been made to requirements for external influences, RCDs, socket-outlets and connectors.</p>	<p>The changes in this Section were already accommodated in Work Section V34 when this was added in June 2018. The existing Work Section V34 also aligns with the 3rd Edition of the IET Code of Practice for Electric Vehicle Charging Equipment Installations, that was published in September 2018.</p>
Section 730 Onshore units of electrical shore connections for inland navigation vessels	
<p>This is an entirely new section. Section 730 applies to onshore installations dedicated to the supply of inland navigation vessels for commercial and administrative purposes, berthed in ports and berths. Most, if not all, of the measures used to reduce the risks in marinas apply equally to electrical shore connections for inland navigation vessels. One of the major differences between supplies to vessels in a typical marina and electrical shore connections for inland navigation vessels is the size of the supply needed.</p>	<p>New Clause 320.155 has been added to Work Section W51 for earthing of electrical systems for onshore units of electrical shore supplies for inland navigation vessels, to reflect the new Section 730 in BS 7671:2018.</p> <p>Guidance has been added to Clauses 320.150 and 320.155 in Work Section W51 to help users decide whether to use Clause 320.150 (for locations to Section 709, Marinas) or Clause 320.155 (for locations to Section 730, onshore supplies for inland navigation vessels).</p>
Section 753 Heating cables and embedded heating systems	
<p>This retitled section has been completely revised. The scope of Section 753 has been extended to apply to embedded electric heating systems for surface heating. The requirements also apply to electric heating systems for de-icing, frost prevention and similar applications, and cover both indoor and outdoor systems.</p>	<p>The following Clauses have been updated to include reference to BS 7671:</p> <ul style="list-style-type: none"> V50:300.010 V51:300.010, 320.010 <p>Specific information and documentation requirements are included in Regulation 753.514.1 of BS 7671:2018, and to ensure that this can be specified:</p> <ul style="list-style-type: none"> V50:310.010 has been updated

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New changes in NES

Commentary on update from BS 7671	Notes on NES Updates in December 2018
<p>Heating systems for industrial and commercial applications complying with BS EN 60519, BS EN 62395 and BS EN 60079 are not covered.</p>	<ul style="list-style-type: none"> • New Clause V51:320.020 DOCUMENTATION AND USER INFORMATION FOR EMBEDDED HEATING SYSTEMS has been included <p>In addition, in Work Section V51:</p> <ul style="list-style-type: none"> • The Work Section has been renamed ELECTRICAL ROOM HEATING UNITS AND EMBEDDED (UNDERFLOOR AND IN-WALL) HEATING since room heating may also be embedded in walls. The terminology aligns with BS 7671:2018 • Clause 320.010 has been renamed INSTALLATION OF ELECTRIC HEATING UNITS AND EMBEDDED HEATING to align with the Work Section being renamed
<p>Appendices</p>	
<p>The following main changes have been made within the appendices:</p>	
<p>Appendix 1 British Standards to which reference is made in the Regulations has been updated, as necessary.</p>	<p>No impact on NES requirements. Relevant standards continue to be updated where necessary.</p>
<p>Appendix 3 Time/current characteristics of overcurrent protective devices and RCDs The previous content of Appendix 14 concerning earth fault loop impedance has been moved into Appendix 3.</p>	<p>No impact on NES requirements.</p>
<p>Appendix 6 Model forms for certification and reporting This appendix includes minor changes to the certificates, changes to the inspections (for new installation work only) for domestic and similar premises with up to 100 A supply, and examples of items requiring inspection for an electrical installation condition report.</p>	<p>No impact on NES requirements.</p>
<p>Appendix 8 Current-carrying capacity and voltage drop for busbar trunking and powertrack systems This appendix includes changes regarding rating factors for current-carrying capacity.</p>	<p>No impact on NES requirements.</p>
<p>Appendix 14 Determination of prospective fault current As stated earlier, the content of Appendix 14 concerning earth fault loop impedance has been moved into Appendix 3. Appendix 14 now contains information on the determination of prospective fault current.</p>	<p>No impact on NES requirements.</p>
<p>Appendix 17 Energy efficiency</p>	

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New changes in NES

Commentary on update from BS 7671	Notes on NES Updates in December 2018
<p>This is a new appendix that provides recommendations for the design and erection of electrical installations, including installations having local production and storage of energy, for optimizing the overall efficient use of electricity.</p> <p>The recommendations within the scope of this appendix apply for new electrical installations and modification of existing electrical installations. Much of this appendix will not apply to domestic and similar installations. It is intended that this appendix will be developed into Part 8 of BS 7671 in a future amendment.</p>	<p>No impact on NES requirements at this time.</p>

Preliminaries / General Conditions - A31, A37, A64 & B20

- Update of clauses and clause guidance where reference is made to BSRIA BG 6 (A Design Framework for Building Services) to reflect Edition 5 - 2018.
- General update of existing drawing definitions clauses so they align with the updated definitions in BG 6 Edition 5 – 2018:
 - A31:160.000 to 183.000, 230.000 & 310.000
 - A64:520.010 & 800.010 to 800.170
 - A37:120.000
 - B20:100.835
- New clauses added for Technical Design Schematics (for RIBA Stage 4)
 - A31:163.000
 - A64:800.054

Residential Projects (Self-Contained Specification) - B20

- Clause 800.601 has been updated in line with new Regulation 559.10 of BS 7671:2018. This Regulation requires that ground-recessed luminaires are selected and installed to take account of the guidance given in Table A.1 of BS EN 60598-2-13.
- Clauses 800.502 and 800.503 have been updated to facilitate the specification of arc fault detection devices to BS EN 62606, and Type B and Type F RCDs to BS EN 62423, in accordance with BS 7671:2018.
- Clauses 800.502 and 800.503 have been updated to reflect co-ordination requirements of Section 536 of BS 7671:2018.
- Clause 800.030 has been revised to align with BS 7671:2018, particularly to facilitate the specification of structural and foundation earth electrodes, and earth electrodes for the purpose of minimising touch voltages in the event of a broken protective earth and neutral (PEN) conductor in a public PME supply network supplying the installation.
- The following clauses have been updated to incorporate the requirements of Regulation 521.10.202 of BS 7671:2018 (18th Edition of the IET Wiring Regulations), which states that all wiring systems shall be supported such that they will not be liable to collapse in the event of a fire: 800.301, 800.302, 800.303, 800.304, 800.305, 800.314, 800.402, 800.408.
- Clause 800.408 has been updated to include for the installation of low smoke, zero halogen and similar cables, and also the installation of telecommunication and data cables.

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- New Clause 1300.501 for inspection and testing of electrical installations, which aligns with Clause 900.900 of Work Sections V91 and V92.
- New Clause 800.315 for pre-fabricated wiring systems.
- New Clause 800.419 for installation of pre-fabricated wiring systems.

Catering Equipment - N12

New content added to 300.010 together with references to BS EN 16282-7 and FIA Guidance note on interface between fire fighting systems and other systems in commercial kitchens. These are for use when the catering equipment manufacturer is required to provide fire suppression system.

Below Ground Drainage and Sewage Pumping - R12, R20 & R21

- A number of design and construction standards added to Part 1 clause 100.020 (in R12 & R20) for pumping systems, structural design, construction and testing of drains and sewers and components used in drains and sewers.
- BS EN ISO 13260 added to R12:310.050 and R20:300.080 for manufacturer testing of thermoplastic piping systems.
- Polypropylene pipe added as option to R12:310.050 with reference to relevant part of BS EN 1852 / PD CEN/TS 1852-2.
- BS EN ISO 11296-2 added to R12:310.055 for renovation of U/G non pressure plastic drainage.
- BS EN ISO 11297-2 and -4 added to R12:310.065 and R20:300.090 for renovation of U/G pressure plastic drainage.
- BS EN 1610 for construction and testing of drains and sewers added to R12:300.010, 360.030, 360.040, and 360.050.
- BS EN 1610 also included in S16:320.060 for water testing of manholes and to Y51.2090 for pressure testing under slab drainage.
- BS EN 752 removed and BS EN 858 added to R12:360.060.
- BS EN 752 removed and relevant parts of BS EN 16932 added to R12:360.070.
- BS EN 1610 and BS EN 16932 added to R21:300.100.
- Withdrawn BS EN 1671 replaced with relevant parts of BS EN 16932 in R20:300.010, 300.020 and 320.010 for pressure sewerage systems outside buildings.
- Text added to R20:320.010 to clarify scope of standards referenced.

Water Reclamation System - S17

- BS EN 16941-1, which replaces BS 8515 for systems for the use of rainwater, added to 300.010, 310.005 and 320.010.
- Clause guidance for 300.010 also updated.

Compressed Air - S30

New clause 310.062 for compressed air lubricators for air tools and pneumatic devices added.

Natural Gas - S32, T32, S12 & B20

- Text added to S32:310.010, 310.012 and 310.015; T32:200.055; S12:200.160; B20:300.224 and 400.205 to clarify the applications of standards for meters and meter housings.
- List of standards for meter types added to S12:200.160.

Liquid Fuel Firing for Heating and Hot Water – T10, B20, P30, T32, T40, T41 & T42

- General update of sections / clauses below, where BS 5410-2 is referenced. These account for the 2018 version of the standard covering the design, installation, commissioning and maintenance of liquid fuel firing installations:
 - B20:400.203
 - P30:300.050
 - T10:310.080 & 320.040

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- T32:200.024, 200.040, 200.058 & 200.060
- T40:310.000
- T41:200.010
- T42:310.010
- General update of section and clause guidance to reflect BS 5410-2.

Solar Water Heating - T15

- Text added to clarify context of standards in 310.020 & 310.021.
- Text added / re-arranged in 320.010 and 320.020 to clarify what types of system BS EN 12976 and BS EN 12977 are for.

Combined Heat and Power Systems - T19

Clauses 300.007, 300.010, 300.040, 310.100 and 320.015 have been updated to reflect the replacement of Energy Networks Association (ENA) Engineering Recommendations G83 and G59 by G98 and G99 respectively. These Engineering Recommendations provide requirements for grid-connected generators of all types, including inverters, that operate in parallel with the grid. G98 or G99, as appropriate to the rating of the generator, must be used for new generation from 27 April 2019.

Combined Heat and Power Systems - T19 (healthcare clauses only)

- Clause 100.011 has been updated to take into account Department of Health HTM 06-01:2017. In particular, requirements have been added for resilience of supply and relationship with other sources of supply/generation. It should be noted that HTM 06-01:2017 recognises the use of various types of generation and sources of supply to achieve supply resilience, but that it also addresses the impact individual technologies may have on resilience should they fail, or not integrate correctly.
- New Clause 100.021 has been added to provide design parameters for CHP systems used in healthcare premises, in particular relating to relationship with other sources of supply/generation and impact on resilience. It should be noted that HTM 06-01:2017 recognises the use of various types of generation and sources of supply to achieve supply resilience, but that it also addresses the impact individual technologies may have on resilience should they fail, or not integrate correctly.

Refrigeration, A/C Sections and Dehumidification Sections - T60, T69, T14, U60, U39, T70, T62 & Y44

BS EN 12102-1 added to numerous clauses for the determination of the sound power level of air conditioners, liquid chilling packages, heat pumps for space heating and cooling, dehumidifiers and process chillers.

Kitchen Ventilation - U12

- Reference to the relevant parts of BS EN 16282 (Equipment for commercial kitchens) added to the following clauses:
 - 100.020 (Design parameters / Standards) – clause title also amended to include “standards”
 - 310.010 (Canopies / Hoods) – types of hood as classified in BS EN 16282-2 added, plus BS EN 16282-7 and FIA Guidance note on interface between fire fighting systems and other systems in commercial kitchens (version 1 published March 2018)
 - 310.030 (Ductwork) – references to BS EN 16282-4 and -5 added for air inlets/outlets and ductwork serving kitchens
- New clause 310.012 added for Kitchen Ventilation Ceilings (with reference to BS EN 16282-3 and DW/172).
- New clause 310.032 added for Treatment of Aerosols / Pollution in Kitchen Exhaust Systems (with reference to BS EN 16282-8).

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Emergency and Standby Generators - V10

Clause 310.130 has been updated to reflect the replacement of Energy Networks Association (ENA) Engineering Recommendations G83 and G59 by G98 and G99 respectively. These Engineering Recommendations provide requirements for grid-connected generators of all types, including inverters, that operate in parallel with the grid. G98 or G99, as appropriate to the rating of the generator, must be used for new generation from 27 April 2019.

Emergency and Standby Generators - V10 (healthcare clauses only)

Clauses 100.011 and 100.021 have been updated to take into account Department of Health HTM 06-01:2017. In particular, requirements have been added for resilience of supply and interaction with other sources of supply/generation. It should be noted that HTM 06-01:2017 recognises the use of various types of generation and sources of supply to achieve supply resilience, but that it also addresses the impact individual technologies may have on resilience should they fail, or not integrate correctly.

HV Supply / Distribution / Public Utility Supply - V11 (healthcare clauses only)

Clauses 100.011 and 100.021 have been updated to take into account Department of Health HTM 06-01:2017. In particular, requirements have been added for resilience of supply and interaction with other sources of supply/generation. It should be noted that HTM 06-01:2017 recognises the use of various types of generation and sources of supply to achieve supply resilience, but that it also addresses the impact individual technologies may have on resilience should they fail, or not integrate correctly.

LV Supply / Public Utility Supply - V12 (healthcare clauses only)

- Clause 100.011 has been updated to take into account Department of Health HTM 06-01:2017. In particular, requirements have been added for resilience of supply and interaction with other sources of supply/generation. It should be noted that HTM 06-01:2017 recognises the use of various types of generation and sources of supply to achieve supply resilience, but that it also addresses the impact individual technologies may have on resilience should they fail, or not integrate correctly.
- New Clause 100.021 has been added to provide design parameters for LV supply systems used in healthcare premises, in particular relating to relationship with other sources of supply/generation and impact on resilience. It should be noted that HTM 06-01:2017 recognises the use of various types of generation and sources of supply to achieve supply resilience, but that it also addresses the impact individual technologies may have on resilience should they fail, or not integrate correctly.

Solar Photovoltaic (PV) Systems - V13

Clauses 300.010, 310.010, 310.050 and 320.010 have been updated to reflect the replacement of Energy Networks Association (ENA) Engineering Recommendations G83 and G59 by G98 and G99 respectively. These Engineering Recommendations provide requirements for grid-connected generators of all types, including inverters, that operate in parallel with the grid. G98 or G99, as appropriate to the rating of the generator, must be used for new generation from 27 April 2019.

Solar Photovoltaic (PV) Systems - V13 (healthcare clauses only)

Clauses 100.011 and 100.021 have been updated to take into account Department of Health HTM 06-01:2017. In particular, requirements have been added for resilience of supply and interaction with other sources of supply/generation. It should be noted that HTM 06-01:2017 recognises the use of various types of generation and sources of supply to achieve supply resilience, but that it also addresses the impact individual technologies may have on resilience should they fail, or not integrate correctly.

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Wind Power Systems - V14

Clauses 310.015, 310.016, 310.050 and 320.010 have been updated to reflect the replacement of Energy Networks Association (ENA) Engineering Recommendations G83 and G59 by G98 and G99 respectively. These Engineering Recommendations provide requirements for grid-connected generators of all types, including inverters, that operate in parallel with the grid. G98 or G99, as appropriate to the rating of the generator, must be used for new generation from 27 April 2019.

Wind Power Systems - V14 (healthcare clauses only)

Clauses 100.011 and 100.021 have been updated to take into account Department of Health HTM 06-01:2017. In particular, requirements have been added for resilience of supply and interaction with other sources of supply/generation. It should be noted that HTM 06-01:2017 recognises the use of various types of generation and sources of supply to achieve supply resilience, but that it also addresses the impact individual technologies may have on resilience should they fail, or not integrate correctly.

LV Distribution - V20

Work Section Guidance has been updated to reflect the requirements for co-ordination of Section 536 of BS 7671:2018.

LV Distribution - V20 (healthcare clauses only)

- Clauses 100.011 has been updated to take into account Department of Health HTM 06-01:2017. In particular, requirements have been added for resilience of supply and interaction with other sources of supply/distribution/generation. It should be noted that HTM 06-01:2017 recognises the use of various types of generation and sources of supply to achieve supply resilience, but that it also addresses the impact individual technologies may have on resilience should they fail, or not integrate correctly.
- New Clause 100.021 has been added to provide design parameters for LV distribution systems used in healthcare premises, in particular relating to relationship with other sources of supply/generation and impact on resilience. It should be noted that HTM 06-01:2017 recognises the use of various types of generation and sources of supply to achieve supply resilience, but that it also addresses the impact individual technologies may have on resilience should they fail, or not integrate correctly.

General LV Power - V22

Work Section Guidance has been updated to reflect the requirements for co-ordination of Section 536 of BS 7671:2018.

General LV Power - V22 (healthcare clauses only)

Clause 100.021 has been updated to remove the requirement to supply a medical IT system (IPS), as this is now covered by a separate and distinct Work Section V33.

Medical IT Power Supplies (IPS) - V33

- Clause 300.010 has been updated to reflect that fact that arc fault detection devices (AFDDs) are not preferred for Group 1 and Group 2 locations. Guidance has been added explaining the BS 7671:2018 requirements for omission of RCDs and AFDDs on Medical IPS systems.
- Clause 310.030 has been updated to permit the specification of touch voltages below AC 25 V / DC 60 V should the user require this. Guidance has been revised for this clause following publication of BS 7671:2018.

Electrical Vehicle Charging Equipment Installations - V34

Clauses 100.020, 300.030, 310.040 and 320.010 have been updated to reflect the replacement of Energy Networks Association (ENA) Engineering Recommendations G83 and G59 by G98 and G99

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respectively. These Engineering Recommendations provide requirements for grid-connected generators of all types, including inverters, that operate in parallel with the grid. G98 or G99, as appropriate to the rating of the generator, must be used for new generation from 27 April 2019.

Electrical Vehicle Charging Equipment Installations - V34 (healthcare clauses only)

New Clause 100.011 has been added to provide performance objectives for electric vehicle charging installations in relation to their effect on the resilience of supply for healthcare premises.

Electrical Energy Storage Systems (EESS) - V35

Clauses 100.020, 300.010, 310.040 and 320.010 have been updated to reflect the replacement of Energy Networks Association (ENA) Engineering Recommendations G83 and G59 by G98 and G99 respectively. These Engineering Recommendations provide requirements for grid-connected generators of all types, including inverters, that operate in parallel with the grid. G98 or G99, as appropriate to the rating of the generator, must be used for new generation from 27 April 2019.

Electrical Energy Storage Systems (EESS) - V35 (healthcare clauses only)

New clauses 100.011 and 100.021 have been added to include performance objectives and design parameters for electrical energy storage systems used in healthcare premises. These provide for resilience of supply and interaction with other sources of supply/generation. It should be noted that HTM 06-01:2017 recognises the use of various types of generation and sources of supply to achieve supply resilience, but that it also addresses the impact individual technologies may have on resilience should they fail, or not integrate correctly.

Electrical Installation - V90 (Self-Contained Specification)

- Clauses 500.060 and 600.010 have been updated in line with new Regulation 559.10 of BS 7671:2018. This Regulation requires that ground-recessed luminaires are selected and installed to take account of the guidance given in Table A.1 of BS EN 60598-2-13.
- Clauses 500.020 and 500.030 have been updated to facilitate the specification of arc fault detection devices to BS EN 62606, and Type B and Type F RCDs to BS EN 62423, in accordance with BS 7671:2018.
- Work Section Guidance has been updated to reflect the requirements for co-ordination of Section 536 of BS 7671:2018.
- Clauses 500.020 and 500.030 have been updated to reflect co-ordination requirements of Section 536 of BS 7671:2018.
- Clause 500.270 has been revised to align with BS 7671:2018, particularly to facilitate the specification of structural and foundation earth electrodes, and earth electrodes for the purpose of minimising touch voltages in the event of a broken protective earth and neutral (PEN) conductor in a public PME supply network supplying the installation.
- The following Clauses have been updated to incorporate the requirements of Regulation 521.10.202 of BS 7671:2018 (18th Edition of the IET Wiring Regulations), which states that all wiring systems shall be supported such that they will not be liable to collapse in the event of a fire: 300.010, 300.020, 300.030, 300.040, 300.152, 300.180, 300.190, 400.020, 400.065, 400.090, 400.170.
- Clause 600.120 has been updated to include for additional information, required by BS 7671:2018, to be appended to the certification for the electrical installation.
- Section guidance updated to BS 7671:2018.
- New Clause 300.210 for pre-fabricated wiring systems.
- New Clause 400.200 for installation of pre-fabricated wiring systems.

Telecommunications Networks - V91 (Self-Contained Specification)

- The following clauses have been updated to incorporate the requirements of Regulation 521.10.202 of BS 7671:2018 (18th Edition of the IET Wiring Regulations), which states that all

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wiring systems shall be supported such that they will not be liable to collapse in the event of a fire: 900.300, 900.310, 900.320, 900.330, 900.450, 900.470, 900.650, 900.710, 900.790, 900.800.

- Clause 900.900 has been updated to include for additional information, required by BS 7671:2018, to be appended to the certification for the electrical installation.

Security Systems, AV Systems and Non-Security Alarm Systems - V92 (Self-Contained Specification)

- The following clauses have been updated to incorporate the requirements of Regulation 521.10.202 of BS 7671:2018 (18th Edition of the IET Wiring Regulations), which states that all wiring systems shall be supported such that they will not be liable to collapse in the event of a fire: 900.300, 900.310, 900.320, 900.330, 900.450, 900.470, 900.650, 900.710, 900.790, 900.800.
- Clause 900.900 has been updated to include for additional information, required by BS 7671:2018, to be appended to the certification for the electrical installation.

Fire Detection and Alarm - W50

- Clause 300.010 has been updated to include BS 7671. Section 753 of BS 7671:2018 now encompasses Trace Heating Systems (other than those for commercial and industrial applications to BS EN 60519, BS EN 62395 and BS EN 60079).
- Clause 310.010 has been updated to include for the information and documentation requirements of Regulation 753.514.1 of BS 7671:2018.
- Section guidance updated to BS 7671:2018.

LV Earthing and Bonding - W51

- New Clause 320.155 added for earthing of electrical systems for onshore units of electrical shore supplies for inland navigation vessels, to reflect the new Section 730 in BS 7671:2018.
- Guidance has been added to clauses 320.150 and 320.155 to help users decide whether to use Clause 320.150 (for locations to Section 709, Marinas) or Clause 320.155 (for locations to Section 730, onshore supplies for inland navigation vessels).
- Clause 320.200 has been updated to reflect the touch voltage and resistance limits for the equipotential bonding system in medical locations in Section 710 of BS 7671:2018.
- The Work Section has been renamed ELECTRICAL ROOM HEATING UNITS AND EMBEDDED (UNDERFLOOR AND IN-WALL) HEATING, since room heating may also be embedded in walls. The terminology aligns with BS 7671:2018.
- Clauses 300.010, 310.035 and 320.010 have been updated to include reference to BS 7671 (IET Wiring Regulations)
- Clause 320.010 has been renamed INSTALLATION OF ELECTRIC HEATING UNITS AND EMBEDDED HEATING to align with the Work Section being renamed.
- A new Clause 320.020 has been provided to facilitate the specification of information and documentation in accordance with Regulation 753.514.1 of BS 7671:2018.
- Section guidance updated to BS 7671:2018.
- Clauses 300.010, 300.011, 300.015, 320.010, 320.011, 320.015 have been updated to include BS 7671, as relevant to the changes in Sections 443 and 534 of BS 7671.
- Clause 300.050 has been updated to reflect the changes in BS 7671:2018.

Controls / BMS - W60 & W69

Text added to W60:310.546 and W69:800.070 to clarify scope of standards for CO sensors referenced.

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Pipework - Y10 & Z Part 2

- GRP pipe to BS ISO 10639 added as option in Part 2 clause 210.050 for water supply.
- BS 4514 added to 210.050, Y10.2580A & 2585A (in addition to BS 1329-1 as it supplements it) for PVC-U pipe for soil and waste discharge (low and high temperature) within the building structure.
- New clause 2580F added for structured-wall PVC-U piping systems for drainage pipes (referencing BS EN 1453-1) with link from 210.050.
- Options of BS ISO 10467 or BS EN 14364 for GPR systems of U/G drainage added to 210.050.
- BS EN 13476-1 added to Y10.2553A and 2553B as this standard is the general requirements and has to be read in conjunction with Part 2 or 3 of the standard that were only cited in these clauses.

Pipeline Ancillaries / Valves - Y11 & Z Part 2

- Standard for butt welded ends of valves added to 2160#, 2070#, 2070B.
- References to BS EN 736 for definition of valves and components added to 211.010.
- Standards for requirements / design method for corrugated metal hose assemblies for pressure applications added to 211.260.

Ventilation Performance Requirements - Y40, Y51, U10, U14, U19 & T70

- Withdrawn standard BS EN 13779 removed from Part 2 clauses on testing of AUH's / fans
- BS EN 16798-3 (replacement for BS EN 13779) added to U10/U19 100.020/100.025 for classification of system / performance requirements for ventilation and room-conditioning systems. Same standard also added to U14:310.005 and T70:100.025.

Cables and Wiring - Y61 & Z Part 2

- The following clauses have been updated to incorporate the requirements of Regulation 521.10.202 of BS 7671:2018 (18th Edition of the IET Wiring Regulations), which states that all wiring systems shall be supported such that they will not be liable to collapse in the event of a fire: 4010, 4020, 4030, 4030A, 4040, 4090#, 4090A, 4100, 4110#, 4110A, 4130#, 4130A, 4140, 4200#, 4200A.
- New Clause 2010F added for multicore low smoke zero halogen flexible cables to BS EN 50525-3-11.
- New Clause 3140 for pre-fabricated wiring systems.
- New Clause 4120 for installation of pre-fabricated wiring systems.
- The following Clauses have been updated to incorporate the changes to Regulations 422.2.1, 422.3.4, 422.5, and 527.1.3, in BS 7671:2018: 1010; 2010#; 2010A, 2010B, 2010C, 2010D, 2010E, 2020#; 2020A; 2020B, 2020C, 2020D, 2020E, 2020F, 2020G, 2020H, 2020I, 2020K, 2020K, 2020M, 2020N, 2110#. The changes relate to fire performance of cables.
- Clauses 2010#, 2020# and 2050# have been audited due to the changes in the specification tables in certain standards for cables. As part of this review, additional descriptions have been included to help the user to identify which specific cables the standards refer to.
- The following clauses have been updated to incorporate the changes to Regulations 422.2.1 and 527.1.3 in BS 7671:2018, and the minimum EuroClass fire classification in accordance with BS 6701:2016+A1:2017: 2050#, 2050A, 2050B, 2050C, 2050G, 2050H, 2070#, 2070B, 2075, 2080#, 2080A, 2080B, 2090#, 2090A, 2100#, 2100A, 2100B, 2100C, 2100D, 2110#. For cables that are solely within the scope of BS 6701, only the higher fire performance classification has been included.
- Clauses 2050I and 2050K have been updated to specifically require fire performance to BS 7629-1 according to the system requirements for fire alarms and emergency lighting to BS 5839-1 or BS 5266-1.
- Clause 261.020 has been updated to add low smoke zero halogen flexible cables to BS EN 50525-3-11.
- New Clause 261.255 for pre-fabricated wiring systems has been added.

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- Clause 261.260 has been updated to include for the installation of pre-fabricated wiring systems.
- Clause 261.020 has been updated to reflect the fact that the term "flexible cord" is now deprecated and "flexible cable" is the preferred term.
- In Clauses 261.020, 216.040, 261.050 and 261.060, standard cables that are currently strikethrough have been reverted to not strikethrough. This reflects the fact that a wider variety of cables are now being used in the industry, than standard PVC, in a wide range of projects.

Support Components - Cables - Y63

The following Clauses have been updated to incorporate the requirements of Regulation 521.10.202 of BS 7671:2018 (18th Edition of the IET Wiring Regulations), which states that all wiring systems shall be supported such that they will not be liable to collapse in the event of a fire: 2010#, 2010A, 2020#, 2020A, 2020B, 2025#, 2025A, 2025B, 2025D, 2030#, 3010, 3020#, 3020A.

LV Switchgear and Distribution Boards - Y71 & Z Part 2

- The following clauses have been added to facilitate the specification of arc fault detection devices (AFDDs) in accordance with BS 7671:2018:
 - 2235A ARC FAULT DETECTION DEVICES
 - 2235B ARC FAULT DETECTION DEVICES WITH OVERCURRENT PROTECTION
 - 2235C ARC FAULT DETECTION DEVICES WITH RESIDUAL CURRENT PROTECTION
 - 2235D ARC FAULT DETECTION DEVICES WITH OVERCURRENT AND RESIDUAL CURRENT PROTECTION
- Clauses 2240# and 2240A have been revised to permit the specification of Type B and Type F RCDs to BS EN 62423.
- Clause 2230# has been updated to include for combined circuit breaker and arc fault detection functionality.
- Clause 2240# has been updated to include for combined devices with residual current, and overcurrent or arc fault detection.
- Clause 1010# has been updated to include all co-ordination study aspects now required by Section 536 of BS 7671:2018.
- Clauses 2010#, 2010A, 2010B, 2010C, 2010D, 2210#, 2210A, 2220# and 2220A have additional requirements for co-ordination and integration of switchgear and controlgear assemblies in accordance with regulations 536.4.5, and 536.4.201 to 536.4.203, of BS 7671:2018.
- Clause guidance for clause 1010# has been updated to reflect the requirements for co-ordination of Section 536 of BS 7671:2018.
- With the introduction of arc fault detection devices in BS 7671:2018, the range of available combination protective devices (incorporating more than one type of protection in a single package) has increased. Clause 271.190 has therefore been renamed MINIATURE PROTECTION DEVICES INCORPORATING SWITCHING OR ISOLATION FUNCTIONS FOR DISTRIBUTION BOARDS AND CONSUMER UNITS
- Clause 271.200 for residual current devices has been deleted, and the requirements moved into Clause 271.190.

Contactors and Starters - Y72

Clauses 2010# and 2010A have additional requirements for co-ordination and integration of switchgear and controlgear assemblies in accordance with regulations 536.4.5, and 536.4.201 to 536.4.203, of BS 7671:2018.

Luminaires and Lamps - Y73

- Clauses 2010#, 2010A have been updated in line with new Regulation 559.10 of BS 7671:2018. This Regulation requires that ground-recessed luminaires are selected and installed to take account of the guidance given in Table A.1 of BS EN 60598-2-13
- Clause 2010C has been removed as it is substantially the same as 2010A.

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- Clause 273.020 has been updated to remove the reference to Clause Y73.2010C as this has been deleted.
- Clause 273.100 has been updated in line with new Regulation 559.10 of BS 7671:2018. This Regulation requires that ground-recessed luminaires are selected and installed to take account of the guidance given in Table A.1 of BS EN 60598-2-13.

Earthing and Bonding - Y80 & Z Part 2

- Clauses 2040#, 2040A, 2040B and 2040C have been revised in line with regulation group 542.2 of BS 7671:2018. In particular, this addresses the electrical and mechanical integrity of the earth electrode system.
- Clauses 2040#, 2040B and 2040D have a further requirement added that addresses the use of earth electrodes for the purpose of minimising touch voltage in the event of a broken PEN conductor in the public PME supply network supplying the installation.
- A new Clause 2040E has been added for the specification of foundation earth electrodes, and includes relevant requirements in line with Regulation group 542.2 of BS 7671:2018, and the use of foundation earth electrodes for the purpose of minimising touch voltage in the event of a broken PEN conductor in the public PME supply network supplying the installation.
- Clause 280.030 has been revised to facilitate the specification of foundation earth electrodes, and earth electrodes for the purpose of minimising touch voltage in the event of a broken PEN conductor in the public PME supply network supplying the installation.

Testing and Commissioning of Electrical Services - Y81

- Clause 1010 has been updated to reflect the changes in Part 6 of BS 7671, to include for test methods and test equipment to BS EN 61557-series, and BS EN 60079-17 for installations in explosive atmospheres.
- Clauses 2020# and 2020A have been renamed PROSPECTIVE FAULT CURRENT in line with BS 7671, and reference has been made to the new Appendix 14 of BS 7671:2018. Symbols have been aligned with Part 2 of BS 7671.
- In Clauses 2030# and 2030A for Initial Verification, and Clause 2050 for Testing, references have been revised to align with BS 7671:2018, because Part 6 was completely re-written from BS 7671:2008+A3:2015.
- Clauses 2040# and 2040A have been updated to state that test equipment should comply with relevant parts of BS EN 61557 (in accordance with BS 7671:2018), and both BS EN 61010 and HSE Guidance Note GS38 (for electrical safety).
- Clause 2070 has been renamed PROTECTION BY AUTOMATIC DISCONNECTION OF SUPPLY to align with the new Regulation Group 643.7 in BS 7671:2018. It has been extended to include for all of the requirements of Regulation 643.7.1 for verification of BS 7671 requirements for automatic disconnection of supply for all TN, TT and IT systems. Symbols are aligned with Part 2 of BS 7671:2018.
- Clause 2130 has been revised to include for calibration reference sources traceable to UKAS standards.
- Clauses 2140, 2150 and 2160 have been revised to take into account the requirements for certification and reporting in BS 7671:2018, including the provision of appended risk assessments, test results and other documentation required by BS 7671.
- Clause 3010 has been renamed EXTRANEIOUS-CONDUCTIVE-PARTS AND PROTECTIVE BONDING, and re-written to align with BS 7671:2018 and IET Guidance Note 5: Protection Against Electric Shock (8th Edition).
- Clauses 281.020 and 281.030 have been updated to take into account the renaming of Y81 clauses 2020A, 2020# and 2070.

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Section 3 Schedules

Below is a summary of the updates to schedules in Excel that can be activated by clicking on the links from NES clauses.

Some guidance has been incorporated into many of the schedules in the form of "comments" that are displayed when hovering over certain cells.

These supplied NES schedules:

- Are independent of classification
- Have been updated to a common formatting theme
- Are orientated as landscape for ease of publishing

For a complete listing and print preview of all NES schedules refer to document NES Building Services Schedules, located on the "Guidance" tool bar, under "Other Resources".

The list below covers significant amendments / changes to existing schedules and new schedules.

Types

U – Existing schedule that has been significantly updated

N – New schedule

Section Reference		Schedule Name	Type	Details
CAWS	BG 56			
Z Part 2, B20, V90, V91, V92	C2.6.20	Cables Technical Details by Application	U	These schedules have all been updated to include specification for fire performance of cables.
Z Part 2	C2.6.20	Main and Sub-Main Cables Design Data	U	
W70, V91, V92	C2.3.30	Structured Cabling Copper Patch Cords	U	Guidance has been included on the selection of suitable EuroClass fire performance codes.
W70, V91, V92	C2.3.30	Structured Cabling Fibre Patch Cords	U	

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Section 4 Detail Changes to Reference Documents

Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
A13, A64, S33, W50, W51, Y41, Y61, Y73, Y92	A1.4, C1.3.20, C2.5.10, C2.1.100, D1.4.460, D2.6.20, D2.2.50, D4.30	BS EN 60079-0:2012+A11:2013 Explosive atmospheres. Equipment. General requirements	Withdrawn, Superseded	BS EN IEC 60079-0:2018 Explosive atmospheres. Equipment. General requirements
A13, A64, S33, W50, W51, Y41, Y61, Y73, Y92	A1.4, C1.3.20, C2.5.10, C2.1.100, D1.4.460, D2.6.20, D2.2.50, D4.30	BS EN 60079-7:2007 Explosive atmospheres. Equipment protection by increased safety "e" BS EN 60079-15:2010 Explosive atmospheres. Equipment protection by type of protection "n"	Withdrawn, Superseded	BS EN IEC 60079-7:2015+A1:2018 Explosive atmospheres. Equipment protection by increased safety "e"
B20, N11, N13, S11, S12	C5.20, C5.40, C1.2.20	BS EN 1287:1999 Sanitary tapware. Low pressure thermostatic mixing valves. General technical specifications	Withdrawn, Superseded	BS EN 1287:2017 Sanitary tapware. Low pressure thermostatic mixing valves. General technical specification
B20, T14, T16, T60, T62, T70, U39, U50, U60, U62, U70, Y10	C1.4.70, C1.4.90, C1.4.380, C1.4.400, C1.4.390, C1.4.350, C1.4.370, C1.4.430, D1.8.10	BS EN 1451-1:2000 Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure. Polypropylene (PP). Specifications for pipes, fittings and the system	Withdrawn, Superseded	BS EN 1451-1:2017 Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure. Polypropylene (PP). Specifications for pipes, fittings and the system
B20, V90, V91, V92, Y61	D2.6.20		New Addition	BS EN 13501-6:2014 Fire classification of construction products and building elements. Classification using data from reaction to fire tests on electric cables
B20, S12, S32, T32	C1.3.10	BS EN 14236:2007 Ultrasonic domestic gas meters	Withdrawn, Superseded	BS EN 14236:2018 Ultrasonic domestic gas meters
B20, V90, V91, V92, X22, Y61	C3.2.30, D2.6.20		New Addition	BS EN 50117-4-2:2015 Coaxial cables. Sectional specification for CATV cables up to 6 GHz used in cabled distribution networks

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Section 4 Detail Changes to Reference Documents

Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
B20, V92, W11	D2.3.40		New Addition	BS EN 50131-2-10:2018 Alarm systems. Intrusion and hold-up systems. Intrusion detectors. Lock state contacts (magnetic)
B20, V92, W11	D2.3.40		New Addition	BS EN 50131-2-8:2016 Alarm systems. Intrusion and hold-up systems. Intrusion detectors. Shock detectors
B20, V92, W11	D2.3.40		New Addition	BS EN 50131-5-3:2017 Alarm systems. Intrusion systems. Requirements for interconnections equipment using radio frequency techniques
B20, V90, V91, V92, Y61	D2.6.20		New Addition	BS EN 50575:2014+A1:2016 Power, control and communication cables. Cables for general applications in construction works subject to reaction to fire requirements
B20, V90, V91, V92, Y61	D2.6.20	BS EN 60332-3-10:2009 Tests on electric and optical fibre cables under fire conditions. Test for vertical flame spread of vertically-mounted bunched wires or cables. Apparatus	Superseded but remains current	BS EN IEC 60332-3-10:2018 Tests on electric and optical fibre cables under fire conditions. Test for vertical flame spread of vertically-mounted bunched wires or cables. Apparatus
B20, V90, V91, V92, Y61	D2.6.20	BS EN 60332-3-21:2009 Tests on electric and optical fibre cables under fire conditions. Test for vertical flame spread of vertically-mounted bunched wires or cables. Category A F/R	Superseded but remains current	BS EN IEC 60332-3-21:2018 Tests on electric and optical fibre cables under fire conditions. Test for vertical flame spread of vertically-mounted bunched wires or cables. Category A F/R
B20, V90, V91, V92, Y61	D2.6.20	BS EN 60332-3-22:2009 Tests on electric and optical fibre cables under fire conditions. Test for vertical flame	Superseded but remains current	BS EN IEC 60332-3-22:2018 Tests on electric and optical fibre cables under fire conditions. Test for

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Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
		spread of vertically-mounted bunched wires or cables. Category A		vertical flame spread of vertically-mounted bunched wires or cables. Category A
B20, V90, V91, V92, Y61	D2.6.20	BS EN 60332-3-23:2009 Tests on electric and optical fibre cables under fire conditions. Test for vertical flame spread of vertically-mounted bunched wires or cables. Category B	Superseded but remains current	BS EN IEC 60332-3-23:2018 Tests on electric and optical fibre cables under fire conditions. Test for vertical flame spread of vertically-mounted bunched wires or cables. Category B
B20, V90, V91, V92, Y61	D2.6.20	BS EN 60332-3-24:2009 Tests on electric and optical fibre cables under fire conditions. Test for vertical flame spread of vertically-mounted bunched wires or cables. Category C	Superseded but remains current	BS EN IEC 60332-3-24:2018 Tests on electric and optical fibre cables under fire conditions. Test for vertical flame spread of vertically-mounted bunched wires or cables. Category C
B20, V90, V91, V92, Y61	D2.6.20	BS EN 60332-3-25:2009 Tests on electric and optical fibre cables under fire conditions. Test for vertical flame spread of vertically-mounted bunched wires or cables. Category D	Superseded but remains current	BS EN IEC 60332-3-25:2018 Tests on electric and optical fibre cables under fire conditions. Test for vertical flame spread of vertically-mounted bunched wires or cables. Category D
B20, N11, R30	C5.20, C1.1.80		Amendment 11	BS EN 60335-2-4:2010+A11:2018 Household and similar electrical appliances. Safety. Particular requirements for spin extractors
B20, N12, R30	C5.30, C1.1.80		Amendment 2	BS EN 60335-2-89:2010+A2:2017 Household and similar electrical appliances. Safety. Particular requirements for commercial refrigerating appliances with an incorporated or remote refrigerant unit or compressor

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Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
B20, V90, W22, X22, Y73	C2.3.100, C3.2.30, D2.2.50		Amendment 1	BS EN 60598-1:2015+A1:2018 Luminaires. General requirements and tests
B20, V90, Y61	D2.6.20		New Addition	BS EN 61984:2009 Connectors. Safety requirements and tests
B20, V90, Y71	D2.6.50		New Addition	BS EN 62423:2012 Type F and type B residual current operated circuit-breakers with and without integral overcurrent protection for household and similar uses
B20, V90, Y71	D2.6.50		Amendment 1	BS EN 62606:2013+A1:2017 General requirements for arc fault detection devices
N11, S12, S32, S33, T32	C5.20, C1.3.10, C1.3.20	BS EN 12405-1:2005+A2:2010 Gas meters. Conversion devices. Volume conversion	Withdrawn, Superseded	BS EN 12405-1:2018 Gas meters. Conversion devices. Volume conversion
N13	C5.40		New Addition	BS EN 816:2017 Sanitary tapware. Automatic shut-off valves PN 10
R12, R13, R20, R21, S16, Y51	B8.1.30, C1.1.30, C1.1.60, C1.1.70, C1.2.60, D1.10.20	BS EN 752:2008 Drain and sewer systems outside buildings	Withdrawn, Superseded	BS EN 752:2017 Drain and sewer systems outside buildings. Sewer system management
R12	C1.1.30		New Addition	BS EN 858-1:2002 Separator systems for light liquids (e.g. oil and petrol). Principles of product design, performance and testing, marking and quality control
R12	C1.1.30		New Addition	BS EN 858-2:2003 Separator systems for light liquids (e.g. oil and petrol). Selection of nominal size, installation,

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Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
				operation and maintenance
R12, R20	B8.1.30, B8.1.60		New Addition	BS 9295:2010 Guide to the structural design of buried pipelines
R12, R20	B8.1.30, B8.1.60		New Addition	BS EN 1295-1:1997 Structural design of buried pipelines under various conditions of loading. General requirements
R12	C1.1.30		New Addition	BS EN 1852-1:2018 Plastics piping systems for non-pressure underground drainage and sewerage. Polypropylene (PP). Specifications for pipes, fittings and the system
R12, R20	B8.1.30, B8.1.60		New Addition	BS EN 13508-1:2012 Investigation and assessment of drain and sewer systems outside buildings. General Requirements
R12, R20	B8.1.30, B8.1.60		New Addition	BS EN 13508-2:2003+A1:2011 Investigation and assessment of drain and sewer systems outside buildings. Visual inspection coding system
R12, R20, R21	B8.1.30, B8.1.60, C1.1.70		New Addition	BS EN 16932-1:2018 Drain and sewer systems outside buildings. Pumping systems. General requirements
R12, R20, R21	B8.1.30, B8.1.60, C1.1.70		New Addition	BS EN 16932-2:2018 Drain and sewer systems outside buildings. Pumping systems. Positive pressure systems
R12, R20, R21	B8.1.30, C1.1.30, B8.1.60, C1.1.60, C1.1.70		New Addition	BS EN 16932-3:2018 Drain and sewer systems outside buildings. Pumping systems. Vacuum systems

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Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
R12, R20	B8.1.30, B8.1.60		New Addition	BS EN 16933-2:2017 Drain and sewer systems outside buildings. Design. Hydraulic design
R12, R20, Y10	C1.1.30, C1.1.60, D1.8.10	BS EN ISO 11295:2010 Classification and information on design of plastics piping systems used for renovation	Withdrawn, Superseded	BS EN ISO 11295:2017 Classification and information on design and applications of plastics piping systems used for renovation and replacement
R12, R20	C1.1.30, C1.1.60	BS EN ISO 11296-1:2011 Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks. General	Withdrawn, Superseded	BS EN ISO 11296-1:2018 Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks. General
R12, R20	C1.1.30, C1.1.60		New Addition	BS EN ISO 11296-2:2018 Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks. Lining with continuous pipes
R12, R20	C1.1.30, C1.1.60	BS EN ISO 11296-3:2011 Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks. Lining with close-fit pipes	Withdrawn, Superseded	BS EN ISO 11296-3:2018 Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks. Lining with close-fit pipes
R12, R20	C1.1.30, C1.1.60	BS EN ISO 11296-4:2011 Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks. Lining with cured-in-place pipes	Withdrawn, Superseded	BS EN ISO 11296-4:2018 Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks. Lining with cured-in-place pipes
R12, R20	C1.1.30, C1.1.60	BS EN ISO 11297-1:2013 Plastics piping systems for renovation of	Withdrawn, Superseded	BS EN ISO 11297-1:2018 Plastics piping systems for renovation of underground drainage

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Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
		underground drainage and sewerage networks under pressure. General		and sewerage networks under pressure. General
R12, R20	C1.1.30, C1.1.60		New Addition	BS EN ISO 11297-2:2018 Plastics piping systems for renovation of underground drainage and sewerage networks under pressure. Lining with continuous pipes
R12, R20	C1.1.30, C1.1.60		New Addition	BS EN ISO 11297-4:2018 Plastics piping systems for renovation of underground drainage and sewerage networks under pressure. Lining with cured-in-place pipes
R12	C1.1.30		New Addition	BS EN ISO 13260:2011+A1:2017 Thermoplastics piping systems for non-pressure underground drainage and sewerage. Test method for resistance to combined temperature cycling and external loading
R12	C1.1.30		New Addition	PD CEN/TS 1852-2:2015 Plastics piping systems for non-pressure underground drainage and sewerage. Polypropylene (PP). Guidance for the assessment of conformity
S17	C1.2.70		New Addition	BS EN 16941-1:2018 On-site non-potable water systems. Systems for the use of rainwater
S30	C1.5.10		New Addition	BS ISO 6301-1:2017 Pneumatic fluid power. Compressed-air lubricators. Main characteristics to be included in supplier's literature and product-marking requirements
S30	C1.5.10		New Addition	BS ISO 6301-2:1997

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Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
				Pneumatic fluid power. Compressed air lubricators. Test methods to determine the main characteristics to be included in supplier's literature
S40, S41, T32, T41, T42	C1.3.30, C1.3.40, C1.4.150	BS EN 12285-1:2003 Workshop fabricated steel tanks. Horizontal cylindrical single skin and double skin tanks for the underground storage of flammable and non-flammable water polluting liquids	Withdrawn, Superseded	BS EN 12285-1:2018 Workshop fabricated steel tanks. Horizontal cylindrical single skin and double skin tanks for the underground storage of flammable and nonflammable water polluting liquids other than for heating and cooling of buildings
S70	C1.6.70, D1.6.70	BS EN 15004-7:2008 Fixed firefighting systems. Gas extinguishing systems. Physical properties and system design of gas extinguishing systems for IG-01 extinguishant	Withdrawn, Superseded	BS EN 15004-7:2017 Fixed firefighting systems. Gas extinguishing systems. Physical properties and system design of gas extinguishing systems for IG-01 extinguishant
S70	C1.6.70	BS EN 15004-8:2008 Fixed firefighting systems. Gas extinguishing systems. Physical properties and system design of gas extinguishing systems for IG-100 extinguishant	Withdrawn, Superseded	BS EN 15004-8:2017 Fixed firefighting systems. Gas extinguishing systems. Physical properties and system design of gas extinguishing systems for IG-100 extinguishant
S70	C1.6.70	BS EN 15004-9:2008 Fixed firefighting systems. Gas extinguishing systems. Physical properties and system design of gas extinguishing systems for IG-55 extinguishant	Withdrawn, Superseded	BS EN 15004-9:2017 Fixed firefighting system. Gas extinguishing systems. Physical properties and system design of gas extinguishing systems for IG-55 extinguishant
S70	C1.6.70	BS EN 15004-10:2008 Fixed firefighting systems. Gas extinguishing systems. Physical properties and system design of gas	Withdrawn, Superseded	BS EN 15004-10:2017 Fixed firefighting systems. Gas extinguishing systems. Physical properties and system design of gas extinguishing systems for

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Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
		extinguishing systems for IG-541 extinguishant		IG-541
T14, T60, T62, T69, T70, U39, U60, Z Part 2	C1.4.70, C1.4.380, C1.4.400, C1.4.390, C1.4.350, C1.4.490	BS EN 12102:2013 Air conditioners, liquid chilling packages, heat pumps and dehumidifiers with electrically driven compressors for space heating and cooling. Measurement of airborne noise. Determination of the sound power level	Withdrawn, Superseded	BS EN 12102-1:2017 Air conditioners, liquid chilling packages, heat pumps, process chillers and dehumidifiers with electrically driven compressors. Determination of the sound power level. Air conditioners, liquid chilling packages, heat pumps for space heating and cooling, dehumidifiers and process chillers
T19, V10, V13	C1.4.100, C2.1.10, C2.1.40	BS ISO 8528-2:2005 Reciprocating internal combustion engine driven alternating current generating sets. Engines	Withdrawn, Superseded	BS ISO 8528-2:2018 Reciprocating internal combustion engine driven alternating current generating sets. Engines
T19, V10, V13	C1.4.100, C2.1.10, C2.1.40	BS ISO 8528-5:2013 Reciprocating internal combustion engine driven alternating current generating sets. Generating sets	Withdrawn, Superseded	BS ISO 8528-5:2018 Reciprocating internal combustion engine driven alternating current generating sets. Generating sets
T32, T69, Z Part 2	C1.8.20		Amendment 1	BS EN 16668:2016+A1:2018 Industrial valves. Requirements and testing for metallic valves as pressure accessories
T70, U14, U19	B8.4.372, C1.4.220		New Addition	BS EN 16798-3:2017 Energy performance of buildings. Ventilation for buildings. For non-residential buildings. Performance requirements for ventilation and room-conditioning systems (Modules M5-1, M5-4)
V11, V13, V14, Y71, Y81	C2.1.20, C2.1.40, C2.1.50,		Amendment 1	BS EN 60076-3:2013+A1:2018 Power transformers. Insulation levels,

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Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
	D2.6.50, D2.8.10			dielectric tests and external clearances in air
V13	C2.1.40	BS EN 61730-1:2007+A11:2014 Photovoltaic (PV) module safety qualification. Requirements for construction	Withdrawn, Superseded	BS EN IEC 61730-1:2018 Photovoltaic (PV) module safety qualification. Requirements for construction
V13	C2.1.40	BS EN 61730-2:2007+A1:2012 Photovoltaic (PV) module safety qualification. Requirements for testing	Withdrawn, Superseded	BS EN IEC 61730-2:2018 Photovoltaic (PV) module safety qualification. Requirements for testing
V33, Y81	C2.1.150, D2.8.10		New Addition	BS EN 61557-10:2013 Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. Equipment for testing, measuring or monitoring of protective measures. Combined measuring equipment for testing, measuring or monitoring of protective measures
V33, Y81	C2.1.150, D2.8.10		New Addition	BS EN 61557-11:2009 Electrical safety in low voltage distribution systems up to 1000 V a.c. and 1500 V d.c. Equipment for testing, measuring or monitoring of protective measures. Effectiveness of residual current monitors (RCMs) type A and type B in TT, TN and IT systems
V33, Y81	C2.1.150, D2.8.10		New Addition	BS EN 61557-13:2011 Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. Equipment for testing, measuring or monitoring of protective measures. Hand-held and hand-

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Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
				manipulated current clamps and sensors for measurement of leakage currents in electrical distribution systems
V33, Y81	C2.1.150, D2.8.10		New Addition	BS EN 61557-15:2014 Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. Equipment for testing, measuring or monitoring of protective measures. Functional safety requirements for insulation monitoring devices in IT systems and equipment for insulation fault location in IT systems
V33, Y81	C2.1.150, D2.8.10		New Addition	BS EN 61557-2:2007 Electrical safety in low voltage distribution systems up to 1000 V a.c. and 1500 V d.c. Equipment for testing, measuring or monitoring of protective measures. Insulation resistance
V33, Y81	C2.1.150, D2.8.10		New Addition	BS EN 61557-3:2007 Electrical safety in low voltage distribution systems up to 1000 V a.c. and 1500 V d.c. Equipment for testing, measuring or monitoring of protective measures. Loop impedance
V33, Y81	C2.1.150, D2.8.10		New Addition	BS EN 61557-4:2007 Electrical safety in low voltage distribution systems up to 1000 V a.c. and 1500 V d.c. Equipment for testing, measuring or monitoring of protective measures. Resistance of earth connection and equipotential bonding

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Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
V33, Y81	C2.1.150, D2.8.10		New Addition	BS EN 61557-5:2007 Electrical safety in low voltage distribution systems up to 1000 V a.c. and 1500 V d.c. Equipment for testing, measuring or monitoring of protective measures. Resistance to earth
V33, Y81	C2.1.150, D2.8.10		New Addition	BS EN 61557-5:2007 Electrical safety in low voltage distribution systems up to 1000 V a.c. and 1500 V d.c. Equipment for testing, measuring or monitoring of protective measures. Resistance to earth
V33, Y81	C2.1.150, D2.8.10		New Addition	BS EN 61557-7:2007 Electrical safety in low voltage distribution systems up to 1000 V a.c. and 1500 V d.c. Equipment for testing, measuring or monitoring of protective measures. Phase sequence
V90, Y73	D2.2.50		Amendment 1	BS EN 60570:2003+A1:2018 Electrical supply track systems for luminaires
V90, V91, V92, W52	C2.1.130		Amendment 11	BS EN 61643-11:2012+A11:2018 Low-voltage surge protective devices. Surge protective devices connected to low-voltage power systems. Requirements and test methods
V91, V92, Y61	D2.6.20		New Addition	BS EN 61300-2-55:2017 Fibre optic interconnecting devices and passive components. Basic test and measurement procedures. Tests. Strength of mounted adaptor

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Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
V91, V92, Y61	D2.6.20		New Addition	BS EN 61300-2-9:2017 Fibre optic interconnecting devices and passive components. Basic test and measurement procedures. Tests. Shock
V91, V92, Y61	D2.6.20	BS EN 62148-1:2002 Fibre optic active components and devices. Package and interface standards. General and guidance	Withdrawn, Superseded	BS EN IEC 62148-1:2018 Fibre optic active components and devices. Package and interface standards. General and guidance
W52, Y80	C2.1.130, D2.1.120	BS EN 62561-1:2012 Lightning Protection System Components (LPSC). Requirements for connection components	Withdrawn, Superseded	BS EN 62561-1:2017 Lightning protection system components (LPSC). Requirements for connection components
W52, Y80	C2.1.130, D2.1.120	BS EN 62561-3:2012 Lightning Protection System Components (LPSC). Requirements for isolating spark gaps	Withdrawn, Superseded	BS EN 62561-3:2017 Lightning protection system components (LPSC). Requirements for isolating spark gaps (ISG)
W52, Y80	C2.1.130, D2.1.120	BS EN 62561-4:2011 Lightning protection system components (LPSC). Requirements for conductor fasteners	Withdrawn, Superseded	BS EN 62561-4:2017 Lightning protection system components (LPSC). Requirements for conductor fasteners
W52, Y80	C2.1.130, D2.1.120	BS EN 62561-5:2011 Lightning protection system components (LPSC). Requirements for earth electrode inspection housings and earth electrode seals	Withdrawn, Superseded	BS EN 62561-5:2017 Lightning protection system components (LPSC). Requirements for earth electrode inspection housings and earth electrode seals
W52, Y80	C2.1.130, D2.1.120	BS EN 62561-2:2012 Lightning Protection System Components (LPSC). Requirements for conductors and earth electrodes	Withdrawn, Superseded	BS EN IEC 62561-2:2018 Lightning protection system components (LPSC). Part 2: Requirements for conductors and earth electrodes (IEC 62561-2:2018)
W52, Y80	C2.1.130, D2.1.120	BS EN 62561-7:2012 Lightning Protection System Components	Withdrawn, Superseded	BS EN IEC 62561-7:2018 Lightning protection system components

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CAWS	BG 56			
		(LPSC). Requirements for earthing enhancing compounds		(LPSC). Requirements for earthing enhancing compounds
Y10, Z Part 2	D1.8.10, C1.8.10		Amendment 1	BS EN 1329-1:2014+A1:2018 Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure. Unplasticized poly(vinyl chloride) (PVC-U). Specifications for pipes, fittings and the systems
Y11, Z Part 2	D1.8.20, C1.8.20	BS EN 736-1:1995 Valves. Terminology. Definition of types of valves	Withdrawn, Superseded	BS EN 736-1:2018 Valves. Terminology. Definition of types of valves
Y11	D1.8.20		New Addition	BS EN 12627:2017 Industrial valves. Butt welding ends for steel valves
Y61	D2.6.20		New Addition	BS EN 13603:2013 Copper and copper alloys. Test methods for assessing protective tin coatings on drawn round copper wire for electrical purposes
Y61	D2.6.20	BS EN 60793-2-10:2016 Optical fibres. Product specifications. Sectional specification for category A1 multimode fibre	Withdrawn, Superseded	BS EN 60793-2-10:2017 Optical fibres. Product specifications. Sectional specification for category A1 multimode fibres
Z Part 2	C1.8.20	BS EN 736-2:1997 Valves. Terminology. Definition of components of valves	New Addition	BS EN 736-2:2016 Valves. Terminology. Definition of components of valves
Z Part 2	C1.8.10	BS EN 13476-1:2007 Plastics piping systems for non-pressure underground drainage and sewerage. Structured-wall piping systems of unplasticized poly(vinyl chloride) (PVC-U), polypropylene	Withdrawn, Superseded	BS EN 13476-1:2018 Plastics piping systems for non-pressure underground drainage and sewerage. Structured-wall piping systems of unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP)

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Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
		(PP) and polyethylene (PE). General requirements and performance characteristics		and polyethylene (PE). General requirements and performance characteristics
Z Part 2	C1.8.10	BS EN 13476-2:2007 Plastics piping systems for non-pressure underground drainage and sewerage. Structured-wall piping systems of unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE). Specifications for pipes and fittings with smooth internal and external surface and the system, Type A	Withdrawn, Superseded	BS EN 13476-2:2018 Plastics piping systems for non-pressure underground drainage and sewerage. Structured-wall piping systems of unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE). Specifications for pipes and fittings with smooth internal and external surface and the system, Type A
Z Part 2	C1.8.10	BS EN 13476-3:2007+A1:2009 Plastics piping systems for non-pressure underground drainage and sewerage. Structured-wall piping systems of unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE). Specifications for pipes and fittings with smooth internal and profiled external surface and the system, Type B	Withdrawn, Superseded	BS EN 13476-3:2018 Plastics piping systems for non-pressure underground drainage and sewerage. Structured-wall piping systems of unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE). Specifications for pipes and fittings with smooth internal and profiled external surface and the system, Type B
Z Part 2	C1.8.20		New Addition	BS EN 14585-1:2006 Corrugated metal hose assemblies for pressure applications. Requirements
Z Part 2	C1.8.10		New Addition	BS ISO 10467:2018 Plastics piping systems for pressure and non-pressure drainage and sewerage. Glass-reinforced thermosetting plastics (GRP) systems

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Work Section		Reference Document - Current	Status of Current Reference	Reference Document - New
CAWS	BG 56			
				based on unsaturated polyester (UP) resin
Z Part 2	C1.8.10		New Addition	BS ISO 10639:2017 Plastics piping systems for pressure and non-pressure water supply. Glass-reinforced thermosetting plastics (GRP) systems based on unsaturated polyester (UP) resin
Z Part 2	C1.8.20		New Addition	PD CEN/TR 14585-3:2017 Corrugated metal hose assemblies for pressure applications. Design method