

**INDICATIVE FIXED WIRE TESTING SCHEDULE**

No.	Description	Frequency	Action
1	Competencies – Personnel	Annually	<p>The contractor will employ a competent and approved electrician with the following:</p> <p>17th Edition of the wiring regulations Course tC&amp;G 2382 (C&amp;G 2382-20 or 2381-10), standard or equivalent and either an Electrical Testing Course tC&amp;G 2391 (C&amp;G 2392) standard or C&amp;G 240 undertake the testing.</p> <p>A person of equal competence shall supervise the work.</p> <p>Original C&amp;G certificates must be produced upon request by the client</p>
2	Test Instruments	N/A	<p>Low resistance ohmmeter - this should be a dual range instrument conforming tBS EN 61557-4</p> <p>Insulation resistance tester - maximum output 4kV is needed tsatisfy 713-05-02(ii)</p> <p>Earth fault loop impedance tester conforming tBS EN 61557-3</p> <p>Earth electrode resistance tester tmeet the requirements of BS EN 61557-5</p> <p>RCD tester capable of indicating that an rcd has operated at its residual current, in the time specified in BS4293</p> <p>Polarity tester - for checking before the supply is connected, a battery and voltmeter or a bell set; for live testing, a magnetic indicator, a voltmeter or a filament lamp (not a neon) with approved fused leads and test probes</p> <p>Test certificates tbe provided (in hardcopy) &amp; recorded on BWT Kykloud</p>
3	Periodic Inspection – General	N/A	<p>Inspection shall take intaccount the following:</p> <p>a) safety</p> <p>b) wear and tear</p> <p>c) corrosion etc by external influence d) damage</p> <p>e) excessive loading/over heating</p> <p>f) age of installation</p> <p>g) suitability of installed equipment</p> <p>h) function of the installation</p>
4	Periodic Inspection process (20% per annum over a 5year testing cycle)	N/A	<p>Inspections shall include items:</p> <p>a) a sample of joints and connections</p> <p>b) identifaction and condition of conductors</p> <p>c) condition of flexible cables and cords</p> <p>d) internal inspection of a sample of switching devices</p> <p>e) presence and integrity of fire barriers where reasonably practicable</p> <p>f) means of protection against direct contact with live conductors</p> <p>g) means of protection against indirect contact with live conductors</p> <p>h) presence, identification, condition and accessibility of protective devices and switching devices</p> <p>i) condition and integrity of enclosures and mechanical protection</p> <p>j) correct labelling of installations with regard tnext inspection, earthing, voltages and presence of residual current devices</p> <p>k) any changes in either the external influences which may effect the installations or alterations and additions that are not appropriate tthe particular external influences present.</p>
5	Periodic Testing Procedure - General	N/A	<p>Periodic testing shall be carried out in accordance with the requirements of the latest editions of BS7671 and Guidance Note 3 - Inspection and Testing.</p> <p>100% Testing shall be undertaken over the 5-year test interval period</p>
6	Periodic Testing Procedure - Sampling	N/A	<p>A minimum of 10% of the installation shall be subject tdetailed inspection and testing. If significant failings are identified, the sample shall be increased t100%</p> <p>Higher levels of sampling may be required by the authority see the particular specification</p>
7	Periodic Testing Procedure - Protective conductors continuity	N/A	<p>Between the earth terminal of distribution boards tthe following exposed-conductive-parts:</p> <p>a) socket outlet earth connections</p> <p>b) accessible exposed- conductive-parts of current- using equipment and accessories</p>
8	Periodic Testing Procedure - Bonding conductors continuity	N/A	<p>a) all bonding main conductors</p> <p>b) all necessary supplementary bonding conductors</p>
9	Periodic Testing Procedure - Ring circuit continuity	N/A	<p>Where there are proper records of previous tests, this test may not be necessary. This test shall be carried out where inspection/ documentation indicate that there may have been changes made tthe ring final circuit (Phase to neutral tests must not be made with electronic devices in circuit.)</p>
10	Periodic Testing Procedure - Insulation resistance	N/A	<p>Tests tbe made:</p> <p>a) between live conductors, with phase(s) and neutral connected together, and earth at all final distribution boards.</p> <p>b) at main and sub-main distribution panels, with final circuit distribution boards isolated from mains.</p>
11	Periodic Testing Procedure - Polarity	N/A	<p>At the following positions:</p> <p>a) origin of the installation</p> <p>b) distribution boards</p> <p>c) accessible socket outlets</p> <p>d) extremity of radial circuits.</p>
12	Periodic Testing Procedure - Earth electrode resistance	N/A	<p>Test each earth rod or group of rods separately, with the test links removed, and with the installation isolated from the supply source.</p>
13	Periodic Testing Procedure - Earth fault loop impedance	N/A	<p>At the following positions:</p> <p>a) origin of the installation</p> <p>b) distribution boards</p> <p>c) accessible socket outlets</p> <p>d) extremity of radial circuits.</p>
14	Periodic Testing Procedure - Functional tests of RCDs	N/A	<p>Tests as required by Regulation 612- followed by operation of the functional test button.</p>
15	Periodic Testing Procedure - Functional tests of Circuit breakers, isolators and switching devices	N/A	<p>Manual operation tprove that the devices disconnect the supply</p>

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16	Labelling of Distribution boards	N/A	Provide at each distribution board: a) A durable label conforming to the requirements of Regulation 514-12-2 b) Updated circuit list conforming to the requirements of Regulation 514 giving details of the circuit connected, phase, cable size and protective device rating.
17	Labelling of Accessories (Socket outlets, switches etc)	N/A	During the testing exercise the Contractor shall label any accessories which are not already labelled.  Use an electronic label-making device to produce self-adhesive labels for each accessory to identify the particular final circuit serving each accessory The labels shall be BLACK text on WHITE tape, of letter size 5mm with all letters UPPER CASE
18	Report Format	N/A	The periodic inspection report shall consist of the following sections: 1.0 Purpose of report 2.0 Summary of installation/inspection (with a schematic) 3.0 Summary of defects 4.0 Installation description 5.0 Photographs 6.0 Access 7.0 Elements tested 8.0 Test result certificates (NICEIC forms) 9.0 Recommended Works/Costs 10.0 Test instruments
19	Report presentation	N/A	The Contractor shall provide: 1 copy, bound in a folder 1 copy in pdf format on CD-ROM Ensure that the report is compiled in a logical methodical manner, progressing from the main switchgear to sub-distribution boards to final sub-circuits in particular ensuring that all items contained on certificate F "Observations and Recommendations for Actions to be taken" are cross referenced to circuit details and photographs. Photographic evidence shall be provided for each identified fault requiring remedial action WHERE APPROPRIATE ALL DOCUMENTATION TO BE RECORDED ON BWT KYKLOUD