WORKING STANDARDS

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Working Standards

The working standards document is designed to assist members of the Portable Appliance Testing Trade Association (PATTA) to explain the methods and standards expected of an association member. The working standards provides a reference to assist in raising standards and improving the reputation of the Portable Appliance Testing Industry.

The objective of this document is to provide advice and information to its members and to recommend a minimum standard, which every member is expected to adhere to.

NOTE: This is in no way a statutory document – each individual member will be expected to complete what test procedures are deemed necessary at the time. However, to gain some consistency in the industry and to provide assurance to the members' clients that there are working standards in place, the association would expect all members to use this document as a "minimum standard" for work carried out. Any queries regarding the content of these working standards should be referred to the association.

General Standards

Competence and Qualifications

The association does not insist on any member holding a specific qualification, but it is expected that members be competent when joining the association. All members must understand that they will be representing PATTA when they carry out the inspection and testing of electrical equipment (PAT Testing). It is therefore essential that members have enough skill and knowledge to be able to complete the appropriate activities.

The association expects all members to have completed some foundation training, however, formal qualifications on their own are not enough to prove competence. If any of the association members use a third party to carry out the work i.e. a sub-contractor, that member must ensure that the person is competent, and the completed work meets with the association's working standards.

PATTA reserves the right to modify or refine this working standards document – it is the responsibility of the individual member to ensure they are working to the latest version.

Equipment

Association members will need to have access to a suitable PAT instrument or another piece of equipment such as a 17th Edition installation tester to be able to complete the inspection and testing. PATTA will not impose any brand or type of testing machine to be used, but members should make sure they have access to a machine suitable for the work they are performing.

The equipment used by the association member must be able to complete a range of tests, depending on the appliance, the class and the environment, they may also need to access various adaptors depending on the equipment being tested. The association can provide the relevant information if requested. The testing equipment is expected to be in good condition and operating correctly, although it is not a legal requirement to have testing machines calibrated on a regular basis, the Association will expect that all machines should be calibrated annually, and the calibration certificate be made available to the customer and/or PATTA if requested. The association can provide information on suitable calibration services if requested and it will be the responsibility of the member to produce the certificate.

Contact with Customers / Quotations

The customer has a right to expect a professional service from the member, from the first point of contact and finishes once the work has been completed.

There are many benefits of being a member of PATTA and should be proud to make current and prospective clients aware of their membership. However, members should be mindful of the fact that when doing so, they represent PATTA and any failure in the provision of service or disagreement can also reflect badly on the Association.

Members should always ensure professionalism when dealing with customers – this includes responding to enquiries and providing accurate and timely information. It is recommended that members issue written quotations e.g. PDF attachments which includes the PATTA logo and their membership number.

The member should give clear and honest information to the customer and when negotiating for new contracts, the member should be clear and concise regarding what will be included in the service. A member may wish to include additional services as well as the routine PAT Testing service. These services offered may include replacement of damaged mains plugs, replacement of incorrect fuses, repairs to appliances, microwave leakage tests, socket checks etc. and should be made clear in the quotation.

All PAT Testing companies have different pricing structures and methods of testing and PATTA does not impose any preferred method. e.g. charging for the cord set and appliance as one item or separately for each detachable mains lead. However, the association does require that the member to be honest with their customers about their pricing structure. Experience has shown that some customers have been unhappy with the pricing structure and methods employed by companies and have complained about what is deemed as “hidden charges”. PATTA promotes that association members offer a “clear and transparent pricing structure” and members should ensure quotations reflect this objective.

Branded Clothing

There is no requirement to wear branded clothing however, it is recommended that members add the PATTA logo to their own workwear.

Further information and PATTA logo is available on request.

Inspection and Test Procedures

PATTA acknowledges that members have their own inspection and test procedures, in addition to their own preferred method of working and therefore does not intend to enforce any preferred method of working. However, the test processes used by the member will need to comply with the current edition of the IET Code of Practice for In-service Inspection and Testing of Electrical Equipment, (ISBN: 978-1-84919-626-0) as well as industry best practices shared and promoted through the Association.

The following information is provided as guidance only for PATTA members and it is not mandatory. A preliminary inspection to determine whether the equipment can be disconnected from the supply and disconnect if permission is received. If permission is not received to disconnect the supply no tests other than a limited visual inspection should be completed. It should be recorded that the equipment has not been fully inspected or tested and noted accordingly.

Visual Inspection

All appliances must be given a thorough visual inspection comprising of an in-depth check of the visual integrity of the plug, fuse, cable and case of the equipment under test. The electrical supply is required to be off for a complete visual inspection to take place. A visual inspection is responsible for finding around 90% of obvious faults with electrical appliances.

Mains Plug

The mains plug inspection requires the plug to be opened (if it is a normal re-wireable type) and a check completed that the correct fuse is fitted, terminal screws are tight and wired correctly. Moulded plugs cannot be opened, but the fuse can be checked. Plugs that do not conform to British Standards (counterfeit) should be "Failed" and the customer notified. Any old-style plugs with non-insulated pins should be documented and the customer made aware or on agreement with the customer replaced. Cardboard wiring diagram sleeves should be removed and disposed of, except for items which are for resale (e.g. charity shop) where they should be left on for the consumer.

Plug Fuse

Part of the visual inspection requires a check to ensure that the plug fuse meets British Standards and is the correct rating for the appliance. BS1363 has standardised on just two preferred fuse ratings, 3-amp and 13-amp, however any fuse rating up to 13-amp can still be used.

- Plugs for appliances rated up to about 700 watts should have a 3-amp fuse (coloured red).
- Plugs for appliances rated between about 700 watts and 3000 watts (the maximum rating of a wall socket) should be fitted with a 13-amp fuse (coloured brown).

One complication of using the 700W rule is that some appliances can draw a higher current when they are first switched on (inrush current). Electric motors for example can draw several times their normal load. A typical example is a vacuum cleaner that may be rated at less than 700 watts but will require a 13-amp fuse to prevent the fuse from blowing when first switched on.

The non-standard fuses are coloured black and are available in 1-amp, 2-amp, 5-amp, 7-amp and 10-amp sizes. 5-amp and 10-amp fuses are often found in detachable leads connected to IT equipment and do not need to be changed provided they are appropriate for the size of cable.

The association recommends that members carry out replacement of incorrect fuses and damaged / unsuitable mains plugs. The member may charge extra for this service and should be agreed in advance with the customer.

Counterfeit and Non-UK Standard Appliances

A growing problem is the number of counterfeit and 'fake' items, which are finding their way into UK businesses. Members of the association should be able to detect and identify counterfeit items and should be expected to keep updated on current warnings and guidance. Updates are available on various sites (https://www.electricalsafetyfirst.org.uk/product-recalls), and members are encouraged to share information about non-standard items they find through the PATTA Forum. (http://patta.uk/).
The overall responsibility for purchasing items belongs to the customer or duty holder who cannot expect to hold an association member responsible if they failed to notice a fake item which is an accurate reproduction during the visual inspection on following combined testing. However, the members should

be on the look-out for suspicious items and should be expected to notice the obvious fakes and counterfeits. e.g. phone chargers, e-cigarette chargers and partially insulated earth pins.

Class I Appliances

A piece of electrical equipment should be tested as a Class I appliance, if there is no additional information shown on the information/rating label.

A member should carry out a visual inspection followed by some or all the following tests which are subject to the class of the appliance.

- earth continuity test
- insulation resistance test
- protective conductor current
- substitute/alternative leakage test
- functional operation

Test result limits and pass values should be in accordance with the current IET Code of Practice for In Service Inspection and Testing of Electrical Equipment.

Class II Appliances

Class II equipment should bear the double square symbol.  If the symbol is not visible, then the appliance should be tested as Class I equipment.

A member should carry out a visual inspection followed by some or all the following tests which are subject to the class of the appliance.

- insulation resistance test
- touch current test
- substitute/alternative leakage test
- functional operation

Test result limits and pass values should be in accordance with the current IET Code of Practice for In Service Inspection and Testing of Electrical Equipment.

Mains Cord Sets and Multi-way Extension Leads

Enough socket outlets should be provided so that multi-way adaptors and extension leads are not necessary however all mains power and multi-way extension leads should be given a thorough visual inspection comprising of an in-depth check of the visual integrity of the plug, fuse, cable and case of the equipment under test.

The visual inspection must always include the unwinding of the cable from the drum and checking the cable for damage. Members must examine that the cable cross section and ensure that the cable is suitable for use and environment and the customer be made aware of any unsuitable or homemade leads in use. All or some of the following tests should be completed subject to the lead under test and the appropriate allowances made for the length of the cable: -

- earth continuity test
- insulation resistance test
- protective conductor current
- substitute/alternative leakage test
- polarity test
- functional operation

Pass result values should be in accordance with the current IET Code of Practice for In Service Inspection and Testing of Electrical Equipment.

Fixed Wired Appliances

The testing of fixed equipment or appliances is more difficult to inspect and test because of the nature of their attachment to the building fabric and their connection to the fixed wiring of an installation, usually via an isolator or fused connection unit (FCU). This doesn't mean that only visual inspections are required for these types of equipment, they should still receive a full combined inspection and test at relevant intervals.

Testing fixed equipment or appliances must be carried out by a competent person, in accordance with the specific tests for the Class of equipment. The person carrying out the inspection and testing: -

- must be competent to carry out safe isolation procedures
- must be competent to carry out this more complex arrangement of work
- must ensure safe systems of work are observed always
- must ensure all inspections and tests, are relevant to the class of equipment

Functional Operation

The purpose of PAT Testing is to determine whether appliances are safe for use, it is not necessary for a member to check the correct operation of each appliance, unless the functional operation is dependent upon its safety. e.g. it may be appropriate to complete a "run test" on a power tool such as a rotary drill.

Test Results

An association member is responsible for the production of a set of results to accompany the completed work and be sent to the customer after the work is completed. The association accepts that a member will request for full payment of the testing before supplying the results and certificates, although this should be agreed in principle with the customer prior to the work being started.

There is no preferred standard for the test results and inventory. They should contain a list of the items tested, information about the visual inspection and the series of tests completed. It is important that the customer can easily be able to identify any appliances that have failed the test, so they can take the appropriate follow-up action.

Labels

Every appliance on passing the required standard to indicate that it is in a safe condition will have a non-destruct appliance label attached to a suitable part of the equipment stating the unique number, date of test and initials of testing engineer. The association member should choose to use suitable labels, whether hand written, pre-printed and/or barcoded labels that look professional and clear to read.

Complaints

The association will offer to provide support to members in the event that a complaint is made against the member that has not been able to be resolved initially. The member must provide the association with all the factual evidence, documented conversations including dates and times. This information must be sent to complaints@patta.co.uk where the information will be reviewed and appropriate advice provided.

Terms of Use

PATTA reserves the right to change these working standards at any time without prior notice. If any changes are made, the revised standards shall be posted on the website. The membership is responsible to ensure they are working to the latest version.