

# PAT Testing policy

A Portable Appliance Test (commonly known as PAT test) is a formal check on electrical safety for mains-powered devices. 90% of the test is a visual inspection to make sure that there is no visible reason that the item is unsafe to repair or defective after a repair. The final 10% is to test insulation and earth connection with the PAT machine, to keep a record, and to issue the appropriate sticker. This document sets out the Cambridgeshire Repair Cafe Network PAT Testing Policy. All documents highlighted in **bold** are available on the [Repair Cafe Organisers' Hub](#).

## 1. PAT testing procedure

### 1.1 Before the Repair Cafe

- Repair Cafe Organisers agree that all mains-powered devices (i.e. items with a mains plug) will be PAT tested at the Repair Cafe. This is the case even if an item is brought in for a mechanical repair e.g. a mechanical fix on a lampshade.
- The **PAT Testing Policy** will be emailed to all repairers prior to the Repair Cafe alongside the **Health & Safety Policy and Risk Assessment**.
- Prior to the Repair Cafe, the Repair Cafe Organiser will print a copy of the **PAT Recording Sheet** from the [Repair Cafe Organisers' Hub](#) and check that all the resources listed in Section 2 of this document are in the toolkit and in good working order.

### 1.2 Room set-up

- A dedicated PAT testing table will be set up in a prominent position near the exit to the Repair Cafe. A mains supply is required if using the PAT unit with Toolkit 1. A repairer who is competent at PAT testing (as defined in Section 3 of this document) will be available ready to PAT test items as needed.
- **Posters** displayed around the room will remind visitors to have their items PAT tested and signpost the designated PAT testing table.

### 1.3 Informing visitors and repairers

- During the Safety Briefing, half an hour before the start of the Repair Cafe, the Repair Cafe Organiser will remind repairers about this **PAT Testing Policy**.
- Visitors will be informed that their item needs to be PAT tested when they register at the Repair Cafe reception. The relevant box regarding PAT testing should be ticked on the **Repair Agreement** by the volunteer at the reception desk. The visitor will then be asked to sign the agreement.

### 1.4 At the repair bench

- When an item with a mains plug is brought to a repair bench, the repairer will, as a minimum, perform the visual inspection part of the PAT test, before starting the repair. Repairers should check that:

- The mains plug is undamaged and is correctly wired;
- The plug fuse is appropriate;
- The mains flex looks safe;
- The item to be repaired has its casing or body intact;
- If the body is metal and there's an earth wire, make sure any metal casing is securely earthed to the mains earth wire.

Laminated **PAT Checklists** are available in the toolkit to remind repairers what to check and should be placed on repair benches.

- Consequences of the visual inspection:
  - If the item fails the visual inspection, any faults found must be resolved before tackling the repair or the repairer may decide that it is unsafe to work on the item.
  - If the item passes the visual inspection but the repairer has any other concerns, the item can be sent for an insulation & earth continuity test at the PAT test table.
  - If the item passes the visual inspection, it is of course still faulty. Our shared toolkit includes an isolating Variac and plug-in RCDs; one of these should be used when the item is powered for diagnosis, repair or checking after repair.

## 1.5 After the repair

- After the repair, the repairer will direct the visitor to the PAT Test Table.
- At the PAT Test Table the repairer designated to PAT test will log the item in the **PAT Recording Sheet**, conduct the insulation and earth continuity tests and record the result.
- The repairer designated to PAT test should be aware of the following item specific guidance:
  - Where there is a separate power brick or battery charger (such as a laptop computer) and this is the only part carrying mains voltages, only that part needs to be tested to make sure that it's doing its job of isolating the mains from the rest of the item.
  - For a cordless kettle or iron, where the adaptor connects mains electricity directly to the item, the whole thing needs to be tested, not just the base part with the mains plug.
  - Double insulated mains powered equipment with NO touchable metal parts and labelled class II, need only be leakage tested by pressing the earth clip on external points such as joins in the case where there may be powered parts on the inside.
  - Class II equipment with touchable metal parts must be PAT tested for leakage current at those metal parts.
  - Note Class II FE equipment, (typically hifi amplifiers with a phono input) will have a terminal marked with an earth symbol. This is a functional earth and will not be connected to mains plug Earth. Test as a Class II item.
  - Note the PAT test unit in Toolkit 1 cannot test extension leads or removable power cables separately from the item they power. The PAT test unit in toolkit 2 can be used to test extension cords using the extra test lead provided.

- If the item passes the test, it is given a green PAT test sticker. If the item fails the PAT test the visitor will be informed that it is unsafe to use.
- For almost every item, if it's repaired correctly it should pass its PAT. A few mains-powered very old devices were not designed to meet today's electrical safety standards, and cannot pass the tests. These ought to be given a red sticker; owners should be advised to take additional precautions if they have to be used. For example, to use a plug-in RCD and never to leave the device unattended while it is connected to the mains.

## 1.6 Record keeping

- The repairer designated to PAT test checks the appropriate box on the **Repair Agreement** to indicate whether the item passed or failed the PAT test.
- The visitor then hands their **Repair Agreement** in at the exit along with their feedback form. This means that the organisers have a signed record showing that visitors were aware that their item needed to be PAT tested and what the outcome was.
- Repair Cafe Organisers should keep the **PAT Recording Sheet** alongside the rest of the Repair Cafe paperwork for a year. After this time any personal information should be destroyed.

## 2. PAT testing resources

### 2.1 Resources in the toolkit

- PAT test unit (Toolkit 1: Mains powered LED model, Toolkit 2: Seaward Primetest 100)
- PAT test unit manual
- Green & Red PAT test stickers
- Laminated posters "Does it have a plug? Remember to PAT test" and "PAT Testing Table"
- Laminated checklists reminding repairers what to check for in a visual inspection prior to repair

Please check that these items are in the toolkit and notify [repairnetwork@cambridgecarbonfootprint.org](mailto:repairnetwork@cambridgecarbonfootprint.org) if they are missing, running low or not functioning.

### 2.2 Resources on the [Repair Cafe Organisers Hub](#)

- PAT Recording Sheet (this needs to be printed prior to the Repair Cafe)
- PAT test poster (this can be printed if there are insufficient laminated copies in the toolkit)
- PAT test checklist (this is intended to be put on repair benches to remind repairers what's involved in the visual inspection component of the PAT test, copies can be printed if there are insufficient laminated copies in the toolkit)

## 3. Who can PAT test items at the Repair Cafe

The test must be done by a *competent person*, which means someone who has completed a PAT training course or someone who can demonstrate competence in electrical safety.

### 3.1 Demonstrating competence

The gold standard for such a course is [City & Guilds 2377](#), but this takes two days. Any repairers with professional PAT test qualifications who are happy to offer these skills to Repair Cafes should outline their qualifications in the Repairers Register. Repairers can email [repairnetwork@cambridgecarbonfootprint.org](mailto:repairnetwork@cambridgecarbonfootprint.org) to update their entries.

If a repairer is keen to offer to PAT test but does not have a formal qualification, Wessex insurance have agreed that the following free course by Parker Bell can be used to demonstrate PAT testing competence for the purpose of a Repair Cafe:

- Course link: <https://www.onlinepattestingcourse.co.uk/>
- Direct link to course material:  
<https://www.onlinepattestingcourse.co.uk/pat-testing-course/>

Repairers should complete this course and keep a screenshot of the “pass” page in order to demonstrate competence.

There are some other useful PAT resources here:

- Some myth busting from the Health and Safety Executive:  
<https://www.hse.gov.uk/electricity/faq-portable-appliance-testing.htm>
- A blog on useful PAT testing tips, including common mistakes to avoid:  
<https://www.pat-testing-training.net/articles/>

## 4. How to find someone to PAT test at your Repair Cafe

You can include a request for someone to PAT test for you in your request for repairers through our monthly newsletter. The newsletter goes out on the first Thursday of the month and requests should be emailed to [repairnetwork@cambridgecarbonfootprint.org](mailto:repairnetwork@cambridgecarbonfootprint.org).

If you do not receive a suitable offer, please email us again and we will help you to find someone. If at all possible, find someone local who can shadow the designated PAT tester and so take on PAT testing responsibilities in future.

If your repairer designated to PAT test is unavailable for any reason on the day you must ask another repairer to take on this responsibility. For this reason it is advisable that you have at least two people supporting your Repair Cafe who are PAT testing competent.

PAT testing is a requirement of the master insurance held by Cambridge Carbon Footprint via Wessex Insurance. If you do not have a competent PAT tester available on the day your insurance for mains powered electrical items is invalid and you are not permitted to accept these items for repair if you are insured under the CCF-Wessex policy.