



EICRs and Coding

AGENDA

- Introduction
- The fault codes
- Consequences of a code
- Non-BS 7671 items
- Inspection or Testing?
- How can we help?
- Summary



INTRODUCTION



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INTRODUCTION

- 6 reasons for conducting periodics (or condition reporting):
 - The safety of persons and livestock against the effects of electric shock and burns
 - Protection against damage to property by fire and heat arising from an electrical installation defect
 - Confirmation of the correct rating and setting of protective devices providing adequate protection against electric shock

INTRODUCTION

- Confirmation of the correct rating and setting of monitoring devices
- Confirmation that the installation is not damaged or deteriorated so as to impair safety
- The identification of installation defects and non-compliances with regards to the requirements of BS 7671, that may give rise to danger.

INTRODUCTION

- EICR Coding is a regular question on the ECA technical helpline
- Coding is not an exact science – depends on numerous factors
- The inspector is best placed to make the call
- Provide guidance/points to consider
- PRS 2020 – England Only

INTRODUCTION

- Contributors:

We would like to thank the following organisations for their continued support:

British Cables Association

Certsure (trading as NICEIC and Elecsa)

City and Guilds

EAL

ECA

Electrical Contractors' Association of Scotland (SELECT)

Electrical Safety First

The GAMBICA Association Ltd

Health and Safety Executive

NAPIT

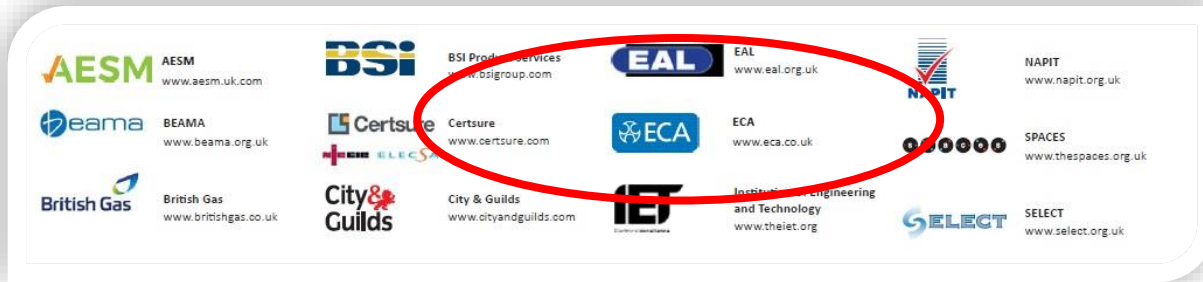
Approved Certification



It is a good idea for those involved with Inspection and Testing to read this document.

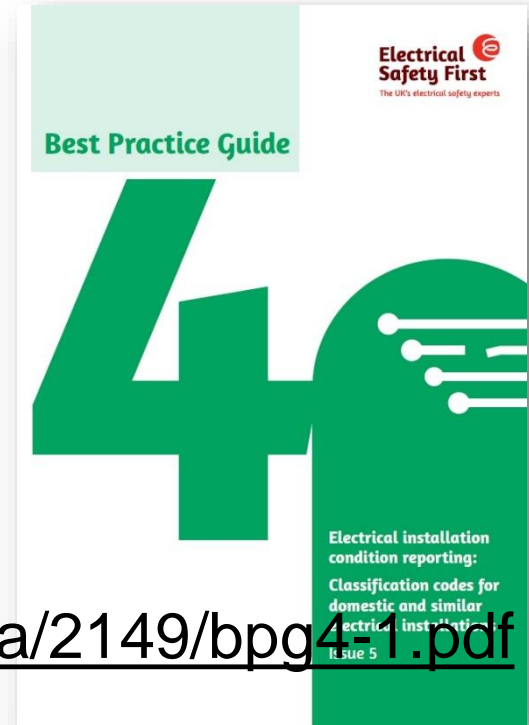
INTRODUCTION

- A non-bias industry guide
- Contributors:



FREE DOWNLOAD

<https://www.electricalsafetyfirst.org.uk/media/2149/bpg4-1.pdf>



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THE FAULT CODES

THE DIFFERENT FAULT CODES

- C1 – Danger Present. Risk of Injury. Immediate remedial action required **aka Immediately Dangerous**

The item is dangerous as it currently appears – no further actions must occur

A failure of basic protection – thus exposed live parts

THE DIFFERENT FAULT CODES

- C2 – Potentially Dangerous – urgent remedial action required

If a fault occurred, it would lead to the installation becoming dangerous.

THE DIFFERENT FAULT CODES

- C3 – Improvement Recommended

A recommendation for improving the current installation, which does not impair the safety aspects

*Think of the language – swapped the word “dangerous” with “recommended”, so the level/type of fault must also reflect this

THE DIFFERENT FAULT CODES

- FI – Further Investigation **without delay**

Not normally required as most items can be sorted into C1,C2,C3

When it is not possible to pinpoint the defect, this code can be used – not to be done lightly as it will lead to the installation being unsatisfactory as a result awarding this code to an item

WHAT CODE WOULD YOU GIVE IT?

THE DIFFERENT FAULT CODES



C1

THE DIFFERENT FAULT CODES



C1

**And possibly a
couple of**

C3's

THE DIFFERENT FAULT CODES



C3

THE DIFFERENT FAULT CODES



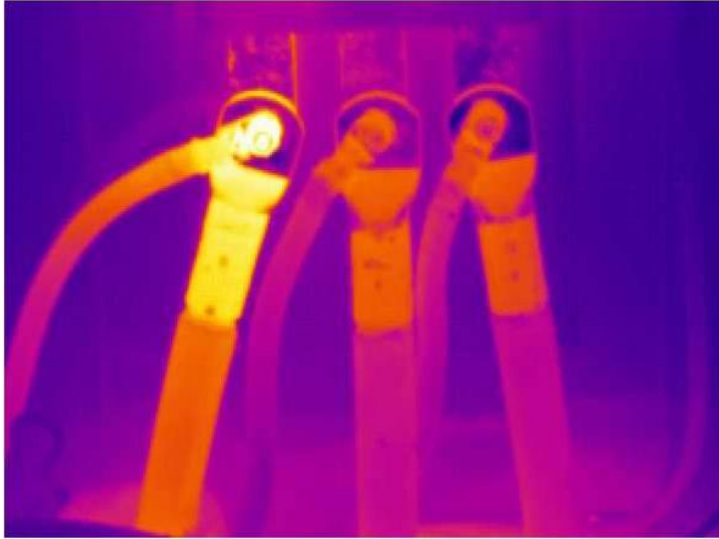
C2

THE DIFFERENT FAULT CODES



**A C1, C2
and a C3 all
in one
picture!**

THE DIFFERENT FAULT CODES



C2

THE CONSEQUENCES OF A CODE

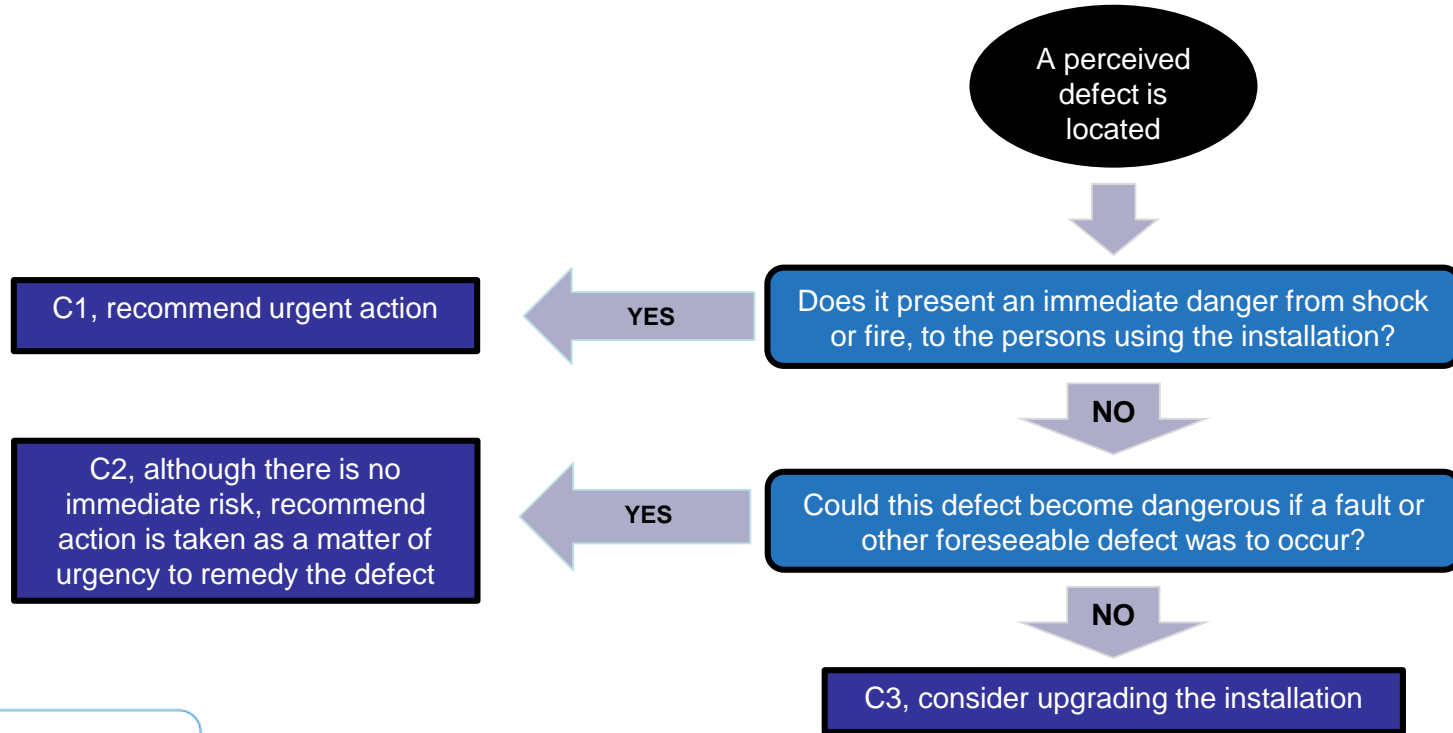
CONSEQUENCES OF A CODE

- Any C1 / C2 / FI codes indicate that the installation is unsatisfactory and requires remedial actions
- C3 codes are recommendations and do not alone cause an installation to be awarded an unsatisfactory result

CONSEQUENCES OF A CODE

- EICRs are another example of risk-based analysis within the electrical industry
- It is the inspectors judgement of the level of risk posed to the safety for building users, by the electrical defect
- Decisions should not be subjective - Must be able to justify any decision to code an item with reference to a contravention of the Regulations (BS 7671)

EICR CODING DECISION TREE



TO FIX OR NOT TO FIX?

- Minor issues – fixed on site
- How to record this information?
- Should not be on the EICRs
- ECA Post-EICR Assessment Completion Form



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[illegible]

NON-BS 7671 ITEMS



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NON-BS 7671 ITEMS

- Outside the scope of an EICR as this are specific for checking an installation against BS 7671
- Best practice: To highlight other concerns that an inspector may have, but not to record on the EICR

INSPECTION OR TESTING?

INSPECTION OR TESTING?

- Truth is, both are required
- Inspection precedes testing and is a 50:50 partner in the relationship
- Can typically spot majority of defects via Inspection alone – if done properly

INSPECTION OR TESTING?

- Be clear about the Extent and Limitations as agreed with client/rep
- Competency of inspector and familiarity with the type of installation
- Where feasible do a walk round survey
- Ask for previous documentation

INSPECTION OR TESTING?

- Covid-19 – Social Distancing
- Reg 4 – Danger
- Reg 29 – Defence
- Advise your client about good record keeping

HOW CAN WE HELP?



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ECA – ELECTROTECHNICAL TRADE ASSOCIATION



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Technical Helpline**



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HOW WE HELP

- Guidance Notes
- Technical Bulletins
- Application Guides
- Input on Industry Codes of Practice
- BSI / IET – JPEL Committees

The image shows two ECA documents. On the left is a 'GUIDANCE Note' titled 'EICRs and coding', which includes a section on 'Key information' and '1. Introduction'. On the right is a 'POST EICR ASSESSMENT COMPLETION FORM', which includes a section for 'POST EICR ASSESSMENT AT:' and a table for 'THE FOLLOWING FAILURES HAVE NOW BEEN RECTIFIED:'. The form also includes a 'DECLARATION' section at the bottom.

SUMMARY

SUMMARY

- The inspector is best placed to award a code
- Always have a balanced approach and think of the consequences of awarding a code
- Can a regulation number be attached to the fault, thus removing any bias from the decision
- EICRs are only to be used when checking against BS 7671
- Inspection is just as important as testing, if not more
- Rejuvenated by the new PRS legislation
- We are here to help our members...Just ask !

QUESTIONS?

