

CAI Guidelines on Process for Product Testing

CAI Cable Certification

The following document details the process and actions required to achieve the CAI Cable Certification.

1. **Introduction**

This procedure is a guideline to ensure that the correct process is followed to allow cables to be tested in accordance with the CAI agreed format. The CAI is the regulatory body and is the point of contact for questions that arise. All enquiries for Certification will be passed onto the CAI approved Test House. Full details of the requirements for cable testing can be obtained from the CAI website: www.cai.org.uk

2. **Approval Procedures**

These are listed below in clauses 3 – 9, however, it must be noted that manufacturers are required to have an ISO accreditation (or equivalent) as a minimum standard of manufacturing practice prior to a cable being considered for the CAI Cable Certification Standard. Accreditation must be concurrent with the full period of the CAI Certificate of Test.

3. When the CAI receives a product submission enquiry, the CAI Administration issues the applicant with a copy of these Guidelines and forwards the enquiry. The Test House will be advised whether the company is a CAI member or not. Should any applications be made direct to the Test House, the Test House is required to copy them to the CAI office so that the CAI can record the application and confirm membership.

4. The Test House replies to the applicant giving the following information: -

- (a) Details of the CAI Cable Certification Specification(s) – these can also be obtained from www.cai.org.uk
- (b) A Quotation detailing all the charges for testing (these charges include the CAI certification fee). Note: The CAI charge is only applied once to each test, i.e. a cable that has been tested and failed will not incur a CAI fee on the second time of testing. However, where a cable is retested at the end of the certificate period the applicant will pay the CAI certification fee as part of the Test House charge.
- (c) An 'Applicant Cable Criteria Details' Questionnaire must be completed and returned before testing can begin, this information will be used during the test as the basis for the 'Cable Test Report'.
- (d) The 'CAI Cable Certification Agreement' must also be completed and returned to the Test House before testing can begin.
- (e) The 'Test House Contract', the contract between the Test House and the Applicant must also be completed and returned to the Test House before testing can begin.

5. Contact details for the CAI approved Test House can be obtained from the CAI website: - www.cai.org.uk

6. On receipt of Details from the Test House, the applicant must provide the following: -

- (a) A signed 'CAI Cable Certification Agreement'. No testing will be undertaken unless the Test House receives this document.
- (b) A signed 'Test House Contract', i.e. the contract between the Test House and the Applicant. No testing will be undertaken until the Test House receives this document.
- (c) A purchase order for the appropriate fees.

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CAI Guidelines on Process for Product Testing – Cable Certification

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Version 14

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Page 1 of 7

- (d) A completed 'Applicant Cable Criteria Details' Questionnaire. **Details of at least two future stockists of the cable to be tested.** The CAI will then arrange to pick up a random sample of the cable (minimum 250 metre drum) and will transport to the Test House. This cable must be a good representation of the cable that will be manufactured and sold. This cable is provided to the CAI without charge and the applicant issues a credit note covering the distributor's stock. If the cable to be tested is not currently distributed in the UK, then details of a future stockist are required in order for the CAI to arrange random sample selection.
 - (e) A copy of the applicant's current ISO accreditation certification (or equivalent) if held must be supplied for certification purposes.
 - (f) A statement on the suitability of the cable for use outside including the cable's stability and weathering. This statement must confirm that the cable is suitable for outside use and that the cable sheath has the necessary protection to avoid both discolouration and damage due to the external environment. Prospective certification holders may wish to consider BS EN 50289-4-17 when answering this question.
 - (g) **CPR Requirement:** A copy of both the Declaration of Performance (DOP) AND Test report for each material grade will be submitted. The CAI requires that the cable will need to be tested every three years and that the new DOP and new Test report needs to be submitted per sheath material for CAI certification purposes.
 - (h) There will be no requirement for CPR certification for Class F and underground/direct burial cable. **The classification is to be printed onto the cable.**
7. The Test House will agree a date for testing.
8. Following testing, the Test House will issue the applicant with the following documentation: -
- (a) Cable Test Report – issued to all applicants.
 - (b) A 'Certificate of Test' – issued to successful applicants only. This certificate has 18 months validity from the test pass date (referred to as the certification period) providing the manufacturer's ISO accreditation (or equivalent) is maintained during certification period. This Certificate of the Test is copied to the CAI office.
 - (c) In order for the certification to last for the full 18 months, the applicant must supply the Test House with copies of their ISO renewal certificates (or equivalents) when these become due.
- Confidentiality** – *In order to ensure confidentiality of the product, information supplied to the Test House by the applicant, together with the Cable Test Report supplied once the cable is tested, is confidential between the applicant, the Test House and the CAI. These results will not be passed to any third parties.*
9. Upon notification from the Test House that a new cable has passed the CAI Certification, the CAI will add the cable to the CAI Cable Certification List on the CAI website etc.
10. **Audit Process**
- (a) **Spot Checks**. At any time during the certification period, the CAI reserves the right to test any cable on the CAI Cable Certification List without warning. The samples for testing are obtained from a retail/distribution outlet of the CAI's choosing. Should a cable fail the spot check, the process for failed cables outlined in paragraph 12 will commence. The CAI may audit cable if it has any reason to believe that the cable may no longer reach the required standard, or it is not the cable that passed the original Certification. Audits will also now include CPR.

- (b) **Changes in Cable Manufacture**. Applicants are required to advise the CAI immediately if the manufacturing process, the manufacturing plant or the manufacturing location is changed during the certification period. The CAI may decide to audit any cable with changed circumstances to ensure the required standards are still being met.

11. **Certificate Renewal**

All cables will require retesting at the end of the certification period. Approximately 60 days prior to the certificate expiry date, the Test House will contact the applicant. If the applicant agrees, then the test procedure is repeated – see paragraphs 3 -10 above. In the case where the applicant does not wish to have the cable retested, the cable is immediately deleted from the CAI Cable Certification List and from the CAI website etc. The CAI membership is then informed using whatever wording the CAI believes necessary. From the expiry of the certification period, the applicant is no longer authorised to use the CAI Certification on the cable or in any way claim or imply that the cable is CAI.

In order to ensure that trade and retail buyers are not misled by false marketing, the manufacturer/distributor will have 12 months from the date the certification expires to clear any existing stock that carries out of date CAI Certification reference markings.

12. **Failed Cables**

Failed cables fall into two categories:

(a) **Category One**

Upon retesting or audit the Test House is convinced that the new cable is not of the same standard/design as the cable originally tested.

Action: The applicant is informed of the failure, and the action to be taken by the CAI. Any cable in stock must be withdrawn from sale, as must any cable within the distribution chain. Furthermore, the applicant is also advised that they are no longer authorised to use the CAI Certification with immediate effect or claim or imply that the cable is CAI Certified. The cable is immediately deleted from the CAI Cable Certification List, the CAI website etc. and the CAI membership is informed as detailed in paragraph 11.

(b) **Category Two**

Upon retesting or audit, the sample is found to have failed. The cable is, however, considered by the Test House to be fundamentally the same standard/design as the original sample submitted for testing.

Action: The applicant is informed of the failure, and the action to be taken by the CAI. The CAI ascertains the batch size of the failed sample and instructs the company that all failed cable must be withdrawn from distribution with immediate effect. The applicant is given a 45-day grace period in writing, effective from the time of writing of the test failure, and they must convince the Test House, and the CAI, that the problem has been overcome. The applicant is also required to withdraw the cable sold on for further distribution via wholesale outlets. Where possible the CAI will advise buyers in the distribution chain that certain batch numbers have had CAI Certification withdrawn.

Should the company fail to convince the Test House that the problem has been rectified within the 45-day grace period the cable is immediately removed from the CAI Cable Certification List and website etc and the membership informed as detailed in paragraph 11. Where possible the CAI will use available publicity outlets, at its discretion, to inform the rest of the industry that the cable has had its CAI Certification withdrawn.

- (c) In all cases where the CAI Cable Certification has not been achieved including both of the above scenarios, the following points must be noted: -

- (i) When the failures have been confirmed immediately in the case of Category One, or after the 45-day grace period in the case of Category Two, or withdrawn for another reason, the applicant is required to immediately recall ALL cable displaying the CAI Certification from the market, from distributors and other retail outlets at the applicant's own cost.
- (ii) The applicant can, however, continue to manufacture the cable in question provided that it does NOT display the CAI Certification or imply or claim to be a CAI Certified Cable.
- (iii) Where an Applicant's Certified cable fails retests on two occasions within an 18-month period, the CAI will ask the applicant to conduct a design review prior to allowing the cable to be retested and will not issue a new Certificate of Test for a period of 12 months from the date of the most recent failure.

13. Identification for CAI Cable Certified Products

Cable that has passed the CAI Cable Certification and is being marketed as CAI Certified Cable must have packaging that clearly displays the applicant's code, the CAI Certificate of Test number, batch number, date and CPR classification.

All cables (and preferably all drums) must be marked with the following as a minimum: -

APPLICANT'S CODE	CAI CERT NO	BATCH NO	CPR CLASSIFICATION
Where,	APPLICANT'S CODE	= Generic Cable Part Number or Code	
	CAI CERT NO	= Certificate Number issued by CAI/Test House	
	BATCH NO	= Applicant's batch number or production date, example format 06-2004 (ie June 2004)	
	CPR Classification	Example Class E, D, C or F with EU marking.	

Other information may be printed on the cable, i.e. applicant's name etc, as required by the applicant or their distributor(s).

Where a cable is found not to carry the correct identification as detailed above, the applicant will be issued with a non-compliance notice from the CAI and be given a grace period of 60 days to correct the non-compliance. Where two such letters are issued over a period of 120 days, the CAI will withdraw the CAI Certification and will instruct the applicant to withdraw the cable from distribution as detailed in paragraph 12(c) above.

13.1 **CAI-013-C/RG6-CAI-SDU/11-2012** specification cable must have printed onto the cable: "RG6-CAI-SDU" in addition to the mandatory information already listed in section 13.

The following statement in bold "**(For Use on Single Dwelling Units) SDU Only**" must also be clearly printed on the drum/reel of cable with the CAI RG6-SDU Certification logo.

14. Marketing of CAI Certified Cable

Once a cable has successfully passed the CAI Certification, it should be marketed as 'CAI Certified Cable' exclusively. Other terms such as 'Sky Approved' should NOT be used although Sky does actively endorse the CAI Cable Certification Scheme. Companies are encouraged to promote the cable as 'CAI Approved' or 'CAI Certified Cable'. In all cases the CAI Certification should be referred to rather than the Test House or Sky - this unified marketing approach will help to strengthen the CAI Certification Scheme in the trade and the public domains.

Where the marketing of the applicant's cable is found to be contrary to the above, the applicant will be issued with a non-compliance notice from the CAI and be given a period of 45 days to correct the non-compliance. Where two such letters are issued over a period of 90 days, the CAI will withdraw the CAI Certification and will instruct the applicant to withdraw the cable from distribution as detailed in paragraph 12(c) above.

15. **CAI Alternative Reference Certification of Certified Cables**

The CAI is now aware that certain manufacturers have cable that is sold on to be marketed under different brand names, codes or reference.

Although sometimes packaged in a completely different manner for retail or distribution purposes, **the cable is identical in every respect to the cable submitted for the original certification test by the manufacturer.**

To allow for alternative reference marking of existing CAI Certified cable, the cable must be issued with an additional certificate by the CAI, clearly showing the alternative brand name, code or reference carried by the alternative packaging or retail listing.

The following additional application process is therefore required if the distributor / retailer of the cable has agreed with the applicant that it would want the cable to carry the CAI Certification appropriate for that cable. In this case the original applicant must apply for the CAI Alternative Reference Certificate.

The expiry date on the certificate for the alternative cable will be the same as the original cable's expiry date.

Cable identification and marketing of the secondary cable shall comply with the paragraphs 13 & 14 above and the primary Certification holder shall be held responsible for compliance.

The CAI will require the following: -

- (a) Completion of the **CAI Alternative Reference Certification Form** (attached) detailing the original cable details etc.
- (b) An order number for invoicing.
- (c) Applicable certification fee – Cheques to be made payable to CAI Ltd and paid in advance.

CAI Member fee	£250 plus VAT
Non-CAI Member fee	£450 plus VAT

It must be stressed that the original certificate holder is responsible for quality control of both cables, i.e. should the cable with the secondary certification fail a spot check, then both cables will be deemed to have failed and the procedures detailed in paragraph 12 will be applied. All fees payable will be the responsibility of the original certificate holder.

The Test House (KIWA Electrical Compliance) will require a fee of £200.00 (payable to KIWA Electrical Compliance) for administration to complete the application prior to issuing the certificate.

16. **Amendment to Certification Specifications**

The CAI reserves the right to amend or add to the CAI Cable Certification Specifications should circumstance require. This will be done in consultation with all applicants on the CAI Cable Certification List at that point in time but the CAI's decision will be final. All applicants will be informed in writing of the change and given a time period, of no more than 120 days to introduce the changes. A shorter notice period will be necessary if the change is required for safety reasons or by law. Failure to introduce changes within the time period and/or in a satisfactory manner may lead to the withdrawal of the CAI Certification and further lead to the exercising of procedures detailed in paragraph 12.

17. The CAI reserves the right to amend these Guidelines at any time without the need for consultation with applicants on the CAI Cable Certification List or those applying for certification approval and amendments will be at the CAI's sole discretion. Once amendments have been made, all applicants on the CAI Cable Certification List will be notified of the new Guidelines and supplied with a copy. The Test House will be instructed to supply the new Guidelines to all new applicants.

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CAI ALTERNATIVE REFERENCE CERTIFICATION FORM - REF: CAI-004-C

Your company details, ie as the Applicant:			
Contact name:			
Tel No:		Fax No:	
E-mail:			
VAT No:		CAI Cable Certification Order No:	
CAI Member: (please tick)		Yes No	
Original Cable Name:		Original Certificate No.	
Name of company which will be retailing/distributing the cable:			
Alternative cable brand name, code or reference to be used:			

I enclose our cheque for £250 plus VAT (CAI Fee), or £450 plus VAT (non-CAI Member fee).

I hereby confirm that I have read and understood the attached Guidelines document and the information that I have given above is correct. I also confirm that, as the original certificate holder, we are responsible for remedial action if the product subsequently fails any retest.

Signed Company

Name in full Date

Ref: CAI-003-C / 07-2010

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Version 14

Date: 21-05-2024

Page 7 of 7