Safe Electric
Validation of Completion Certificates

V1.3 Dec 2022

Contents

1. Definitions

Body	means any person or persons appointed by the Commission, pursuant to the Act, to act as an Electrical Safety Supervisory Body;
Criteria Document	means the Criteria Document which is specified and published by the Commission pursuant to the Act and as may be amended from time to time;
CRU	Commission for Regulation of Utilities
DSO or Distribution System Operator	means any person holding the licence granted under Section 14(1)(g) of the 1999 Act;
Qualified Certifier (QC)	means the person(s) assigned the role of Qualified Certifier by the REC as set out in Section C.1 of the Criteria Document and in accordance with the requirements pursuant to that Section;
Residual Current Device (RCD)	Residual Current Device
Register	means the Register of RECs published by the Body in accordance with Section B.5.2 of the Criteria Document;
Registered Electrical Contractor (REC)	means any party who is registered by the Body pursuant to the Act and who has not had their Registration suspended or revoked by the Body;
Verification and Certification of Electrical installations (V&C)	Verification and Certification of Electrical Installations
Safe Electric Scheme	The Electric Safety Supervisory Body Registered Electric scheme.

2. Introduction

Certification is mandatory for all Controlled Work to ensure that it has been carried out in accordance with the National Rules for Electrical Installations. A definition of the Controlled Work can be found in the Common Procedure No1 – Certification of the CRU Criteria Document. The Validation of Completion Certificates procedure describes the process to verify that the:

- Correct Certificate has been used
- Certificate contains all the requisite information
- Test values are within acceptable limits
- Blank Certificate was issued to the certifying REC

This procedure is limited to the validation of Certificates of type AR (paper form) and type ARE (electronic form) for Electrical Installations with a maximum import capacity of less than 50 KVA and of Certificates of type BR (paper form) and type BRE (electronic form) for installations with a maximum import capacity equal or greater than 50 KVA.
Other types of Certificates such as:

- Sub-System Completion Certificates (Type SR)
- Declaration of Conformance with ET101 for Minor Electrical Installation Works (RD)

are not covered by this procedure as a copy of the Certificate is not returned by the REC for validation. These Certificates may be checked during the course of an inspection of the REC.

Interim Certificates for Part Installations are of type BR only and marked in red. They are processed in the same way as other Certificates with the difference that a flag is set in the Safe Electric data base to differentiate from the normal Certificates. Interim Certificates should be replaced with a final Certificate for the certification of the full installation (with the MPRN No) within a defined period of 6 months. The ESSB monitors the time for receiving the final Certificate and will make contact with the REC if the Certificate is overdue.

Certificates for temporary supply are validated in the same way as other Certificates. The ESSB monitors these Certificates in terms of number and duration as they should ultimately be replaced with final Certificates for the full installation.

3. The Process

The certification process is broadly divided into a pre-connection stage and a post-connection stage.

A. Pre-Connection

At pre-connection stage, the REC completes the pre-connection tests and submits to the ESSB the completed Certificate with the pre-connection section duly filled and signed (Page 2 of the Certificate labelled: Pre-Connection Test to Regulatory Body). The ESSB will then check the Certificate for completeness and correctness and, on the basis that it can be validated, a notification will be forwarded to the DSO for the connection process to be initiated. The notification details are: the Certificate number and type, the RECs mobile phone number, Customer's MPRN, name and address.

Certificates will not be processed if self-certification privileges have been withdrawn as result of the REC's insurance having expired or for any other reason.

In cases where the information provided on the Certificate is missing, incomplete, illegible or incorrect the REC will be contacted by the the ESSB for clarification/correction. The Certificate

will be marked invalid if clarification cannot be obtained. Also, if the Certificate is incorrectly completed, the ESSB will mark it invalid and ask the REC to issue a new Certificate.

B. Post-Connection

Once the installation is energised the REC shall submit to the ESSB the Post-Connection Test Certificate (Page 3 of the Certificate labelled: Post-Connection Test to Regulatory Body) within a defined period of 35 days from the date the notification has been sent to the DSO via a web link, as per Common Procedure No 5 – Enforcement of the CRU Criteria Document. When received, the ESSB will check the post-connection details for completeness and correctness and validate these. In case the information provided is missing, incomplete, illegible or incorrect the REC will be contacted by the ESSB for clarification/correction.

4. Validation

Note; SLA 5 of the Performance Management Framework, the ESSB is required to validate and process the certificates within 2 working days.

C. Pre-Connection

Below is a list of items to be checked before the Certificate is submitted to the DSO for energisation:

Item No	Field / Subject	What to check for
1	Certificate type	Should be: - Type “AR” for small premises with import capacity less than 50 KVA (see items 6 and 10B) or - Type “BR” for premises with an import capacity greater or equal 50 KVA (see items 6 and 10B)
2	Certificate Serial No	a. The Certificate was issued to the REC named in the Registered Contractor box (see item No 12) If the Certificate is used to certify an installation constructed by a Non-REC , it should be signed by an ESSB Inspector. b. Serial number (7 digits long for “AR” and 5 digits long for “BR” and preceded by Certificate type “AR” for less than 50 KVA and “BR” for greater or equal 50 KVA import capacity
3	MPRN number	Fully filled with 11 digits
4	Customer name	Available and legible
5	Address of installation	Available and legible

6	Premises description	Typically can be: - Shop, domestic, agricultural, etc for less than 50 KVA import capacity - Commercial, industrial, etc for greater or equal 50 KVA import capacity
7	Date of installation	Available, legible and plausible
8	Construction & Test of Installation or Test Only of Existing Installation	One only of the 2 tick boxes to be ticked
9	Type of installation	One only of the 4 tick boxes “New”, “Reconnection”, “Alteration”, “Temporary supply” and “Other” to be ticked
10A	**Less than 50KVA Import Capacity:** Boxes for Number of lighting points, socket outlets and fixed appliances outlets	The following general rules may apply: - New and Reconnection: values in all boxes, typically over 5 for lighting points and sockets - Alteration, Temporary supply, Other: values can be below 5 and not all boxes filled - In case of interim Certificate for part installation: values can be below 5 and not all boxes filled
10B	**Greater or equal 50 KVA Import Capacity:** Table for type and KW of equipment connected	- Plausible KW values listed - Maximum import capacity: value in KVA should be equal or greater than 50
11	**Less than 50KVA Import Capacity:** Test results	a. Polarity and earthing of all outlets verified: box ticked b. Main equipotential bonding verified for: at least water should be ticked c. Resistance of protective conductor: expected to be less than 1 Ω except in circumstances where cable runs are very long d. Insulation resistance: 1 MΩ or over e. Test record sheet no: number available and legible f. Associate Sub Systems Certificate Numbers: either Yes or No is ticked
12	Boxes “All New Work must be certified in respect of construction & testing	a. Comment or details: if “Yes” ticked for “Associate Sub Systems Certificate Numbers”, details of these available and legible. b. REC: name, address, telephone number and Reg. No available and legible.
13	Certification: Box Pre-Connection	a. Signed: signature available b. For REC: constructor or tester or both ticked

		c. Qualification: d. Certifier's No: Qualified Certifier number in the format QCxxxx where xxxx is a 4 digit number e. QC number is valid i.e. the REC completed a V&C course in the previous 3 years. f. Date: available and legible g. If the Certificate is used to certify an installation constructed by a Non-REC, it should be counter-signed by a Safe Electric Inspector.

B. Post-Connection

The following items should be checked after the installation has been energised and tested by the REC:

No	Field / Subject	What to check for
14	Post-Connection tests	a. Maximum fault loop impedance: has to comply with the values in table A61C of the National Rules for Electrical Installations (ET101). b. Rating & Type of the associated protective device: details given c. Operation of all RCDs verified: box ticked d. RCD tripping time test: values to be less than 300ms
15	Certification: Box Post-Connection	a. Signed: signature available b. For REC: constructor or tester or both ticked c. Qualification: d. Certifier's No: Qualified Certifier number in the format QCxxxx where xxxx is a 4 digit number e. QC number is valid i.e. the REC completed a V&C course in the previous 3 years. f. Date: available and legible g. If the Certificate is used to certify an installation constructed by a Non-REC, it should be counter-signed by a Safe Electric Inspector.

5. Associated Documentation

- CRU Criteria Document CER/16/001 (Version 3)
- Common Procedure No1: Certification
- Common procedure No2: Third Party Inspection

- Common Procedure No5: Enforcement
- Completion Certificate for an Installation with a Maximum Import Capacity < 50 KVA (see Annex A below)
- Completion Certificate for an Installation with a Maximum Import Capacity >= 50 KVA (see Annex B below)
- I.S. 10101 National Rules for Electrical Installations - current edition

Appendix A

SAFE ELECTRIC
Registered Electrical Contractor

National Rules for Electrical Installations
Completion Certificate for an Installation with a Maximum Import Capacity < 50kVA

REGISTERED

ETCI

† MPRN No. | | | | | | | | | | | |

AR 1142421

CUSTOMER NAME (Block Capitals): .....

ADDRESS OF INSTALLATION (Block Capitals): .....

.....

PREMISES DESCRIPTION (e.g. Shop, Domestic, Agricultural, etc.) .....

..... Date of Installation .....

✓ Tick boxes as appropriate:

THIS CERTIFICATE IS IN RESPECT OF: CONSTRUCTION & TEST OF INSTALLATION ☐

OR TEST ONLY OF THE EXISTING INSTALLATION ☐

TYPE OF INSTALLATION: New ☐ Reconnection ☐ Alteration ☐ † Temporary supply ☐ Other ☐ †

NUMBER OF: Lighting Points ☐ Socket Outlets ☐ Fixed Appliance Outlets ☐

TEST RESULTS

POLARITY AND EARTHING OF ALL OUTLETS VERIFIED (a tick indicates yes) ☐

MAIN EQUIPOTENTIAL BONDING VERIFIED FOR:

	YES	NA‡
GAS		
WATER		
OTHER (specify see details)		

TESTS (please insert values)

RESISTANCE OF PROTECTIVE CONDUCTOR (max) ☐ Ω

INSULATION RESISTANCE (min) ☐ MΩ

DETAILS OF TESTS ETC., ARE GIVEN IN TEST RECORD SHEET NO. _____

† See Chapter 63 "National Rules (ET101)"

‡ NA means Not Applicable

Associate Sub System Certificate Numbers Yes* ☐ No ☐

*See comment box for details

ALL NEW WORK MUST BE CERTIFIED IN RESPECT OF CONSTRUCTION & TESTING

COMMENT OR DETAILS:

.....

.....

.....

.....

REGISTERED CONTRACTOR (Block Capitals)

Name: .....

Address: .....

.....

Tel: ..... RECI Reg No. | | | | | | |

CERTIFICATION

I certify that the electrical installation at the above address has been constructed, and/or pre-connection tests have been carried out, in accordance with the National Rules for Electrical Installations (current issue at date of contract) published by the Electro-Technical Council of Ireland, and has been found to be satisfactory. Test Record Sheets are held by me.

PRE-CONNECTION Pre-connection tests completed and found to be satisfactory

Signed: ..... For Electrical Installation: Constructor ☐ Tester ☐

Qualification: ..... Certifier's No. ..... Date: .....

MAX FAULT LOOP IMPEDANCE ☐ Ω → RATING & TYPE OF THE ASSOCIATED PROTECTIVE DEVICE ☐ RCD CIRCUIT DESCRIPTION ↓

OPERATION OF ALL RCDS VERIFIED ☐

N.B. THESE TESTS MUST BE COMPLETED IMMEDIATELY AFTER SUPPLY IS MADE AVAILABLE

RCD TRIPPING TIME TESTS

30 mA RCD Max Trip Time	@ 30mA	ms	
100 mA RCD Max Trip Time	@ 100mA	ms	
300 mA RCD Max Trip Time	@ 300mA	ms	
500 mA RCD Max Trip Time	@ 500mA	ms	

POST-CONNECTION Post-connection tests completed and found to be satisfactory

Signed: ..... For Electrical Installation: Constructor ☐ Tester ☐

Qualification: ..... Certifier's No. ..... Date: .....

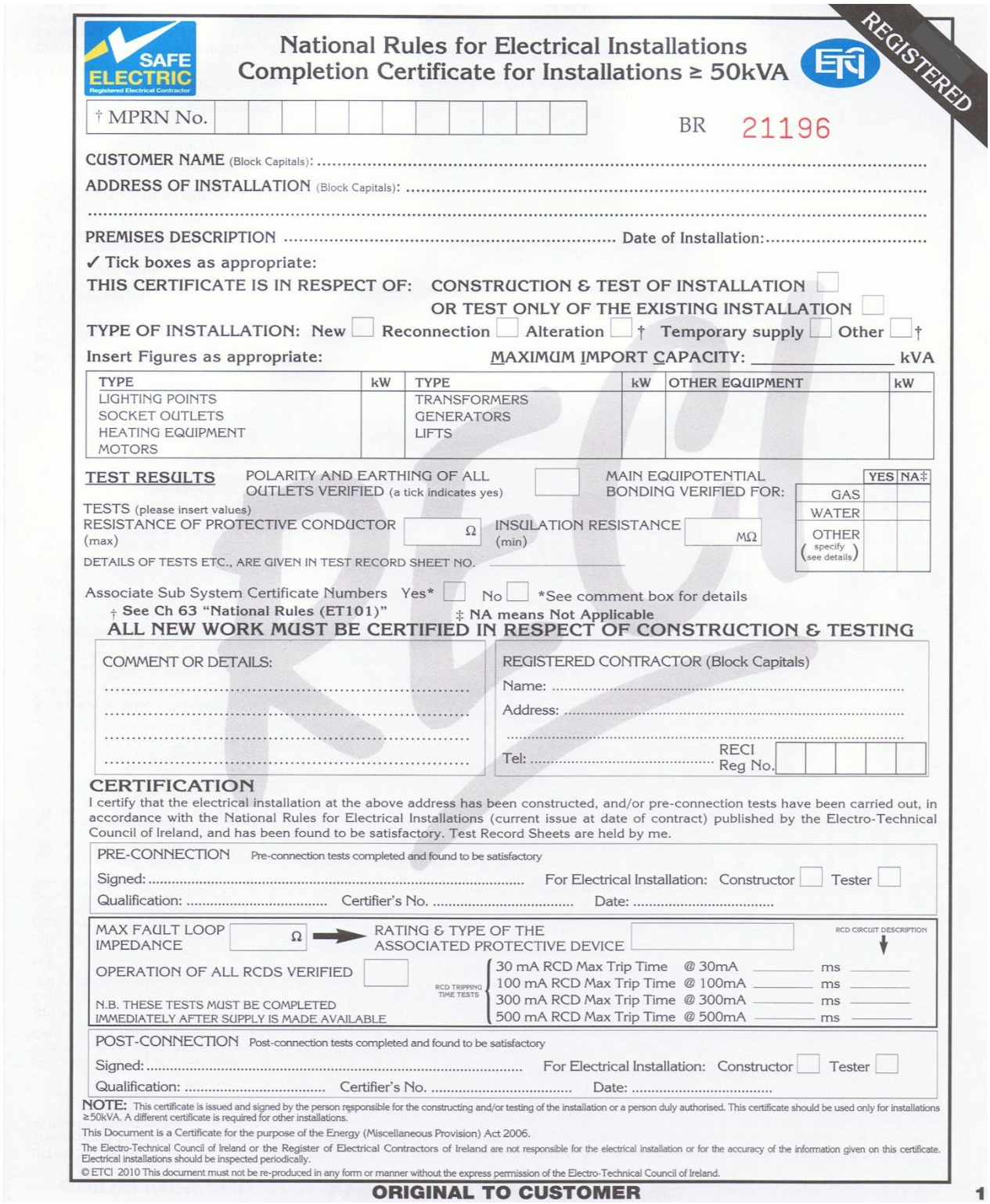
NOTE: This certificate is issued and signed by the person responsible for the constructing and testing, or testing only of the installation or a person duly authorised. This certificate should be used only for installations with a maximum import capacity < 50kVA. A different certificate is required for other installations.

This Document is a certificate for the purpose of the Energy (Miscellaneous Provision) Act 2006.

The Electro-Technical Council of Ireland or the Register of Electrical Contractors of Ireland are not responsible for the electrical installation or for the accuracy of the information given on this certificate. Electrical installations should be inspected periodically.

ORIGINAL TO CUSTOMER 1

Appendix B



SAFE ELECTRIC
Registered Electrical Contractor

National Rules for Electrical Installations
Completion Certificate for Installations ≥ 50kVA

ETCI

REGISTERED

† MPRN No. | | | | | | | | | | | |

BR 21196

CUSTOMER NAME (Block Capitals): .....

ADDRESS OF INSTALLATION (Block Capitals): .....

.....

PREMISES DESCRIPTION ..... Date of Installation: .....

✓ Tick boxes as appropriate:

THIS CERTIFICATE IS IN RESPECT OF: CONSTRUCTION & TEST OF INSTALLATION ☐
OR TEST ONLY OF THE EXISTING INSTALLATION ☐

TYPE OF INSTALLATION: New ☐ Reconnection ☐ Alteration ☐ † Temporary supply ☐ Other ☐ †

Insert Figures as appropriate: MAXIMUM IMPORT CAPACITY: _____ kVA

TYPE	kW	TYPE	kW	OTHER EQUIPMENT	kW
LIGHTING POINTS		TRANSFORMERS			
SOCKET OUTLETS		GENERATORS			
HEATING EQUIPMENT		LIFTS			
MOTORS					

TEST RESULTS

POLARITY AND EARTHING OF ALL OUTLETS VERIFIED (a tick indicates yes) ☐

MAIN EQUIPOTENTIAL BONDING VERIFIED FOR:

	YES	NA‡
GAS		
WATER		
OTHER (specify see details)		

TESTS (please insert values)

RESISTANCE OF PROTECTIVE CONDUCTOR (max) _____ Ω

INSULATION RESISTANCE (min) _____ MΩ

DETAILS OF TESTS ETC., ARE GIVEN IN TEST RECORD SHEET NO. _____

Associate Sub System Certificate Numbers Yes* ☐ No ☐ *See comment box for details

† See Ch 63 "National Rules (ET101)" ‡ NA means Not Applicable

ALL NEW WORK MUST BE CERTIFIED IN RESPECT OF CONSTRUCTION & TESTING

COMMENT OR DETAILS:
.....
.....
.....
.....

REGISTERED CONTRACTOR (Block Capitals)
Name: .....
Address: .....
.....
Tel: ..... RECI Reg No. | | | | | |

CERTIFICATION

I certify that the electrical installation at the above address has been constructed, and/or pre-connection tests have been carried out, in accordance with the National Rules for Electrical Installations (current issue at date of contract) published by the Electro-Technical Council of Ireland, and has been found to be satisfactory. Test Record Sheets are held by me.

PRE-CONNECTION Pre-connection tests completed and found to be satisfactory

Signed: ..... For Electrical Installation: Constructor ☐ Tester ☐

Qualification: ..... Certifier's No. ..... Date: .....

MAX FAULT LOOP IMPEDANCE _____ Ω → RATING & TYPE OF THE ASSOCIATED PROTECTIVE DEVICE _____ RCD CIRCUIT DESCRIPTION ↓

OPERATION OF ALL RCDS VERIFIED ☐

N.B. THESE TESTS MUST BE COMPLETED IMMEDIATELY AFTER SUPPLY IS MADE AVAILABLE

RCD TRIPPING TIME TESTS

30 mA RCD Max Trip Time	@ 30mA	_____ ms	_____
100 mA RCD Max Trip Time	@ 100mA	_____ ms	_____
300 mA RCD Max Trip Time	@ 300mA	_____ ms	_____
500 mA RCD Max Trip Time	@ 500mA	_____ ms	_____

POST-CONNECTION Post-connection tests completed and found to be satisfactory

Signed: ..... For Electrical Installation: Constructor ☐ Tester ☐

Qualification: ..... Certifier's No. ..... Date: .....

NOTE: This certificate is issued and signed by the person responsible for the constructing and/or testing of the installation or a person duly authorised. This certificate should be used only for installations ≥50kVA. A different certificate is required for other installations.

This Document is a Certificate for the purpose of the Energy (Miscellaneous Provision) Act 2006.

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ORIGINAL TO CUSTOMER 1