



Safe Electric, the statutory regulatory scheme for electrical contractors is operated by the Register of Electrical Contractors of Ireland (RECI) on behalf of the Commission for Regulation of Utilities (CRU).

RECI was appointed as a Safety Supervisory Body by the CRU and will operate on a not-for-profit basis under the CRU's Safe Electric brand for the duration of their appointment, 2016 – 2022

2021

SAFE ELECTRIC March NEWSLETTER

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Briefing Note for Safe Electric Members

DSO Switch Disconnecter

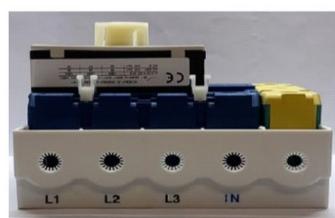
The DSO Switch Disconnecter (Isolator) is the Point of Interface between the DSO LV System and the Customer LV System for individual Whole Current meter connections.

The DSO have introduced a new design of single-phase Switch Disconnecter. This Switch Disconnecter is the same physical size as the three phase Switch Disconnecter.

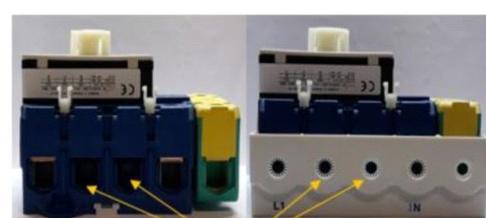
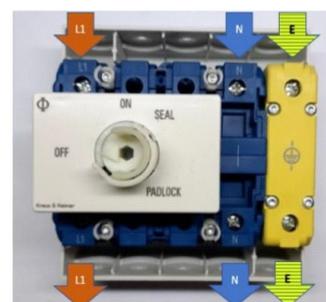
The single-phase Switch Disconnecter model has two poles removed (please see below). The switch is operated by a 5mm hex key driver, as per previous models. The terminal screws are combi head screws, only No.2 plus/minus screwdriver should be used to tighten the terminals.

Prior to operating the Switch Disconnecter the customer load shall be off

Three Phase switch-disconnector



Single Phase switch-disconnector



Unused Blank Terminals

Message from Pierce Martin

RECI / Safe Electric General Manager

Dear Member,

I hope that you and your family are well.

In order to continue Safe Electric's vital role in regulating electrical safety, Safe Electric is implementing its first increase in the price of Cert 1 since 2009 which has been approved by the CRU.

The price of an individual Cert 1 will rise by €6.25 from 2 March. This increase has been kept at lowest level possible and represents less than 1% of the typically €2,000 - €7,000 value of projects that Cert 1 is for. No other certs are affected.

To limit the effect of the price rise on smaller RECs, Safe Electric has introduced the individual sale of Cert 1s as well as in books. Certs can be ordered in quantities of 1,2,3,4,5,10 & 25.

The Covid-19 pandemic has resulted in lower levels of electrical works and a consequent reduction in income from Completion Certificates. Nevertheless, Safe Electric has worked to provide improved services to RECs and customers. The increase will ensure there is sufficient income to continue to operate the Safe Electric scheme, which generates its revenue, required under legislation, from registration fees and safety certificate sales.



The price increase represents a small percentage of the typical range of electrical jobs.

Value of Electrical Work	Cert Price Increase	Price increase as a % of the value of work
€2,000.00	€6.25	0.3125%
€5,000.00	€6.25	0.1250%
€7,000.00	€6.25	0.0893%

Changes in Price of Completion Certificate 1				
Quantity	Current Price Per Book	Current Price Per Certificate	New Price Per Book	New Price Per Certificate
Book of 1		N/A	€18.48	€18.48
Book of 5	€61.15	€12.23	€92.40	€18.48
Book of 10	€90.10	€9.01	€152.60	€15.26
Book of 25	€200.00	€8.00	€356.25	€14.25

RECI/ Safe Electric has provided improved services to RECs and customers alike during the pandemic, including:

- Launch of new online certificate status checker for RECs and their customers, to track progress of receipt of installation completion certificate by Safe Electric to its final submission to ESB Networks for connection to the national distribution grid.
- Implementation of full government protocols including pre-site and onsite risk assessments involving customers as integral part of Safe Electric inspections.
- Wide dissemination of publicly available Covid19 guidance, risk assessment templates and government and industry information on Covid planning, public health standards and required practices.
- Online ordering and payment for certificates (24/7).

RECI/Safe Electric is very grateful to all registered contractors who have worked hard to make the scheme a success and, in the process, build a strong reputation for Registered Electrical Contractors among Irish households nationwide.

If you have any queries please email info@reci.ie or phone 01492 9966.

On behalf of everyone at RECI/Safe Electric, we hope that you and your family are safe and well, and that the weeks and months ahead see greater stability in your business as the Covid vaccination programme takes effect.

Yours sincerely,

Pierce Martin

General Manager – RECI/Safe Electric

Notice regarding Post Connection Test Results

Due to an upgrade of the Safe Electric I.T. systems and particularly the certificate tracking database, it is important that all Registered Electrical Contractors (RECs) return all outstanding Post Connection Test Results for all Pre Connection certificates submitted since the 1st of January 2020.

To assist each REC a list of outstanding Post Connection Certificates will be provided on request by sending an email to postconnection@reci.ie

From Quarter 3 of 2021 the enforcement process outlined in section 2.10 of the Electrical Safety Criteria Document will be strictly implemented. RECs with outstanding Post Connections that exceed the 35 day deadline will result, initially, loss of your certification rights but could lead to disciplinary or revocation from the scheme. Property owners of installations with outstanding Post Connections will also be notified that part 6 of Common Procedure 5 may be implemented.

(Extracts from Common Procedure 1)

- 2.9 The Certificate may only be considered fully completed, following return of a copy to the Body with post-connection tests successfully completed and recorded.
- 2.10 Common Procedure No 5 - Enforcement will be followed in the event of failure to return a copy of the Certificate with the post-connection tests recorded to the Body.

(Extracts from Common Procedure 5)

- 6.2 If an REC does not submit post connection tests within 35 days of supply being made available by the DSO notification must be sent to the REC pointing out that, within 10 working days of the date of the notification, he must submit a valid Post Connection Cert or a written explanation why it is not possible to comply with the notification. This notification will outline that the REC's entitlement to self-certify will be withdrawn. If the REC does not comply with the request outlined above an inhibitor is placed against his registration number on the Body's Database which will prevent the processing of any further Completion Certificates while the problem remains unresolved through the fault of the REC. The REC's entitlement to self-certify shall be withdrawn in accordance with Section B 4.2 of the Criteria document. If the REC still does not comply with the request outlined above within 15 working days the Body will then write to the Customer, pointing out the requirement to have Tests carried out and a Post Connection Test submitted either by the original Contractor or by a replacement REC. If a Post Connection Cert is received within 10 working days the
- 6.3 If the customer ignores or fails to act on the request outlined within 6.2 the issue is referred to an Authorised Officer who shall be appointed by the Commission. The Authorised Officer will contact the Customer and point out the breach of connection conditions and unless immediately rectified (i.e. within 10 working days) the DSO will be contacted to de-energise the connection.
- 6.4 The DSO will validate the request and issue a formal notice to the Customer that the connection will be de-energised giving a minimum of two (2) business days notice as per the DSO's de-energisation code of practice. The customer will also be advised that re-energisation of the connection will involve a reconnection fee.
- 6.5 The DSO will notify the Body when the de-energisation is completed.

Safe Electric staff and inspectors are available to assist any REC who need help identifying and returning these Post Connection Certificate test results.

Introduction of New <50 kva Interim Certificate

Following a submission from Safe Electric the CRU has agreed to allow the introduction of a less than 50 kva interim certificate. The greater than 50 kva certificate was already catered for in the Criteria Document. Interim Certificates are used when ESB Networks require certification, but the installation is not fully complete and therefore the final certificate cannot be issued. The key to the successful operation of the interim certificate is the stipulation that Safe Electric will implement a disconnection request under Common Procedure 5 to the CRU if a follow up final completion certificate is not issued by a Registered Electrical Contractor (REC) within 12 months of the Interim Certificate being submitted.

This potential disconnection process ensures that the Customer / Builder cannot dispense with the services of the REC and use an un-registered contractor to complete the works. If this were to happen the lack of follow up certification by a REC will automatically ultimately lead to disconnection of the premises. It will be important that REC point out this stipulation to the customer / builder when utilising the certificate.

Interim Certificates will be available from Quarter 4 and the cost will be the same as the existing greater than 50

kva interim certificate. The steps in the interim certificate process will be clearly outlined on the front cover of the single Interim Certificate booklet. Key to the operation of the process will be a final carbon copy of the certificate which must be submitted by the REC attached to the final completion certificate to cease the automatic disconnection process.

The process will include several reminder communications being sent to the REC and the homeowner advising that the final certification needs to be submitted to avoid triggering of Common Procedure 5 which could lead to disconnection. If more time is required to finish the electrical installation, a second interim certificate can be issued thereby cancelling the first interim certificate and automatically allowing another 12 months to complete final certification. The change of contractor procedure can be utilised if for some reason the REC who issued the Interim Certificate cannot provide certification for the finished installation.

This welcome development will provide a solution on the many occasions where RECs can feel pressurised to provide a completion certificate before the installation is fully complete.

Clarification of Rule 551.9.4 for P.V Installers

The following Query was sent to NSAI Electrical Technical Committee TC 002 for consideration / clarification. It was considered important that Safe Electric inspectors get clarity on this matter because micro generation includes PV installations which are now common and installers with different interpretations could be at a commercial advantage when pricing work.



Safe Electric Query Rule 551.9.4

551.9.4 Before connecting the micro-generator to an existing installation, the installation shall be inspected and tested in accordance with Chapter 6.

This rule could be interpreted in two ways.

- The existing installation should be inspected and tested
- The new micro-generation installation should be inspected and tested

Q Which interpretation does NSAI/ETC/TC 002 consider the correct one?

A Safe Electric have no preference and are happy to run with the interpretation agreed at NSAI/ETC/TC 002.

The response from NSAI/ETC/TC 002 was clear, Rule 551.9.4 requires that option (a) applies i.e. "before connecting any micro-generator, including a Photovoltaic installation, it is required that the existing installation should be inspected and tested." All RECs installing PV installations should be inspecting and testing the existing installation and making the property owner aware of any non-conformances in the existing installation which will need to be rectified prior to installation of the micro-generation

Electric Vehicle (EV) Charging Points Important Updates

The installation of Electric Vehicle (EV) Charging Points and the specific wiring rules that apply to this work are outlined in part 722 (Supplies for Electric Vehicles) of the wiring rules. This ensures that by law, this work can only be carried out by Registered Electrical Contractors (RECs). All electrical work in Domestic Premises and all work contained in Part 7 of the wiring rules is restricted by law to Registered Electrical Contractors.

According to the CRU Electrical Criteria Document and also the Safe Electric Rules of Registration, RECs can only certify works which they have carried out themselves. It is a clear breach of these rules for RECs to provide certification for EV Chargers installed by non-RECs. In order to avail of the SEAI EV Charger grant applicants can provide a Safe Electric completion certificate which of course only be issued by a REC.

To avoid confusion in the Industry regarding the requirement to install Local Isolation for Domestic and Similar EV Chargers. Safe Electric have requested that the NSAI at Electrical Technical Committee TC 002 provide clarification on this issue.



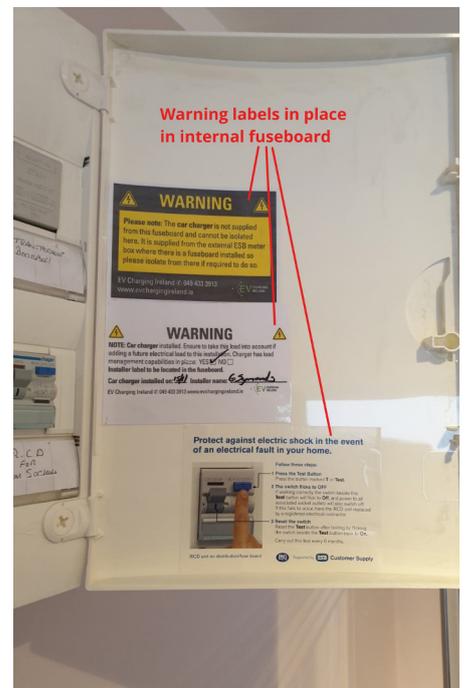
NSAI/ETC/TC 002 has confirmed that an Electrical Vehicle Charger is more than a Socket Outlet and in fact an EV Charger falls under the definition of an appliance in the definition's section of I.S. 10101 (Page 46).

Extract from I.S. 10101

appliance

device that utilises electricity for a particular purpose, excluding a luminaire or an independent motor

According to a number of rules, particularly Rule 555.1 an isolator is required to be installed within 2 meters of an appliance. Safe Electric welcome this clarification, and RECs should note that if EV installations are being inspected and if an isolator is not installed an inspection non-conformance will be issued. This will mean that the REC will be given 10 days to install an isolator and provide a signed non-conformance confirming that the issue has been rectified.



Following representations from ESNB, NSAI/ETC/TC 002 has also agreed that in existing installations, it is now permissible to connect an EV charger at the customers meter cabinet or at the customers Main overcurrent device in a multi-metering arrangement. While the ideal connection point for these chargers will always be the main internal distribution board, this development will provide a solution in situations where it is difficult or impossible to run cables back to the customers distribution board.

In situations where this solution is utilised and in order to comply with rule 134.1.7 it is critical to create an awareness that switching off the main isolator at the customers distribution board will not isolate the EV Charger.

Extract from I.S, 10101

134.1.7 Where necessary for safety purposes, suitable warning signs and/or notices shall be provided.

This can be achieved by placing a warning notice in a prominent location on the main distribution board. It is important that all RECs be aware that connections at the meter cabinet are only to be utilised for providing a solution in existing installations and are not to be used in new installations where it will always be possible to run cables to the distribution board. It is also recommended that only EV chargers are connected at meter locations and connections to garden sheds etc. are not to be encouraged.

The customer equipment, including any overcurrent devices for the EV charging equipment are to be confined to the contractor area of the bottom right hand corner of the cabinet.

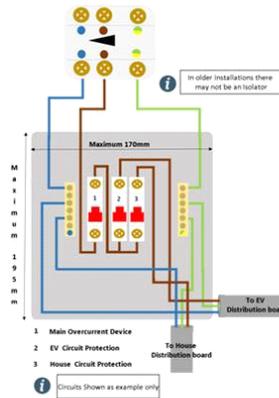
EV Charging connections

As part of the roll out of EV Charging infrastructure, ESB Networks asked NSAI if the provision of EV Charging from the Main Overcurrent Protective device in the outside meter box was allowed. In November 2019 ESB Networks received confirmation from NSAI that it was allowed.

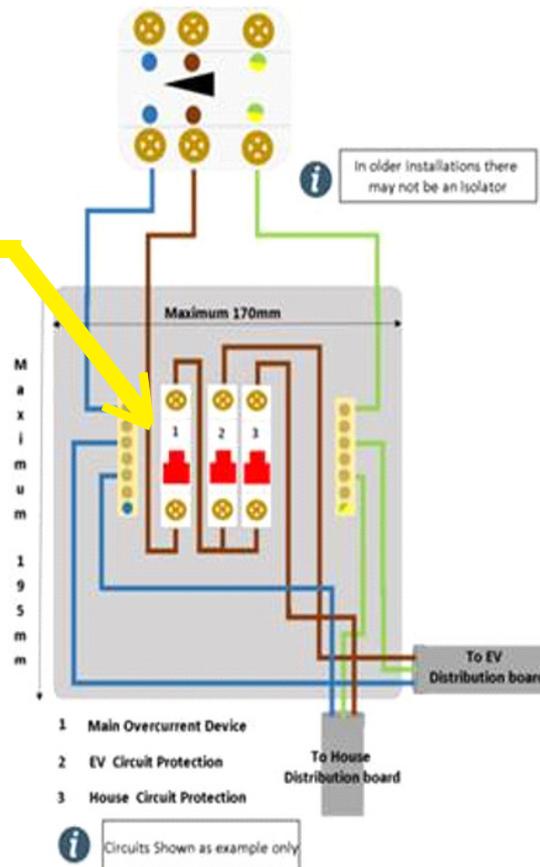
Safe Electric will shortly be publishing an instructing to REC's in their newsletter around this additional connection.

The diagram opposite is an example of how a REC may achieve this additional connection.

- ❖ This work is solely on the customer side of the interface.
- ❖ The work is confined to the space allowed for the IP 55 enclosure in the outside meter box.
- ❖ A label shall be provide at the existing distribution board to state that the full electrical installation is not controlled from this point.



NOTE
Consider Double Pole Isolation and Surge Protection to comply with I.S. 10101



Focus on Periodic Inspection Report (PIR)

Safe Electric have been receiving increasing numbers of enquiries from RECs seeking advice on how to correctly carry out a Periodic Inspection Report (PIR). We are also receiving communication from parties requesting these PIRs querying the quality of some of the reports being received.

I.S 10101 Chapter 6.5 and the HSA Guidance-Note on Periodic Inspection and Testing of Electrical Installations referred to in the new rules, gives lots of detail outlining the correct way to carry out an inspection, the HSA document also suggests different intervals between inspection depending on the type of installation.

Date _____ Periodic Inspection Report for an Electrical Installation PR No. _____

REGISTERED CONTRACTOR DETAILS:
 Name _____
 Address _____

 Reg No. _____


 Electro-Technical Council of Ireland Limited

INSTALLATION DETAILS:
 Occupant Name/Trading as _____
 Address _____

 Occupant in Attendance? Yes No

Installation Approx Age _____

PLEASE CIRCLE ANSWERS OR TICK BOXES AS APPROPRIATE

Installation Category? Domestic Commercial Industrial Other (specify) _____
 Reason for Inspection? Insurance Inspection Safety Audit If Other (specify) _____

Extent of Installation covered by this report? Entire Installation* YES NO (see partial inspection details below)
 * N.B. Cables concealed within trunking and conduits within the fabric of the building or underground have not been inspected unless stated otherwise.

If Partial Inspection Specify what part the report refers to _____

TYPE OF SYSTEM EARTHING : TNCS, TT, TNS, IT

Installation Voltage Single Phase Three Phase L 1. v L2. v L3. v L1-L2 v L2-L3 v L3-L1 v

Max prospective S/C current _____ A Main isolation** and overcurrent device type ? NONE SWITCH FUSE MCB MCCB

Nominal rating _____ A ** If a main RCD is used as a main isolating device the following details are required Rated current I_n _____ A

Tripping current I_{Δn} _____ mA

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A quick guide to both documents.

- Where no existing information on the installation exists, a preliminary survey must be carried out. following the preliminary survey the limitations of what is being inspected must be agreed with the client prior to the inspection.
- The initial inspection must be carried out to ascertain any obvious problems such as overheating or covers and guards missing, damage and deterioration etc. this is done through a visual inspection with limited dismantling of the installation. Sample checks of outlets and fittings are acceptable as a guide to the general standard of the electrical installation.
- A full test of the installation must be carried out including all pre and post connection tests as per Chapter 6 of I.S 10101, and all results recorded on a test record sheet on all circuits as agreed in the limitations.
- A detailed PIR report form recorded with results from both visual and electrical test results recorded on it with the appropriate score depending on the severity of the breach and rule number of the wiring rules. This will include all relevant information such as photos, thermal imaging and a complete test record sheet.
- The report shall be given to the person ordering the inspection or a person authorized to act on their behalf.

Carrying out these inspections and accurately compiling the report is a skill which requires experience and practice. In fact the wiring rules state:

6.5.1.5 The verification shall be made by a skilled person, competent in verification.

It should be noted that customers ordering Periodic Inspection Reports normally do so following a request from their insurance provider or from a County Council prior to committing to a rental agreement. The purpose of the report is to accurately assess the condition of the electrical installation and under no circumstances should deficiencies in the installation be ignored.

I.S. 10101 2020 states that "For works regulated by the Commission for Regulation of Utilities (CRU) Certificates and Reports shall be obtained from the Electrical Safety Supervisory Body (ESSB)" A note on page 492 also states that "This report can be obtained from the Electrical Safety Supervisory Body (ESSB).

Transition from E.T. 101 2008 to I.S. 10101 2020

The transition period began on the **1st of April 2020**. It was permissible but not mandatory to design and certify new Electrical installations to the new standard from this date.

Ten months later from the **1st of February 2021**, all new electrical installations can only be designed and certified to the new standard.

From the **1st of August 2022**, all electrical installations must be designed, constructed and certified to the new standard.

Installations which were designed to the old standard prior to the **1st of February 2021**, can be completed to the old standard, provided they will be certified to at least a pre-connection stage by the **31st of July 2022**.

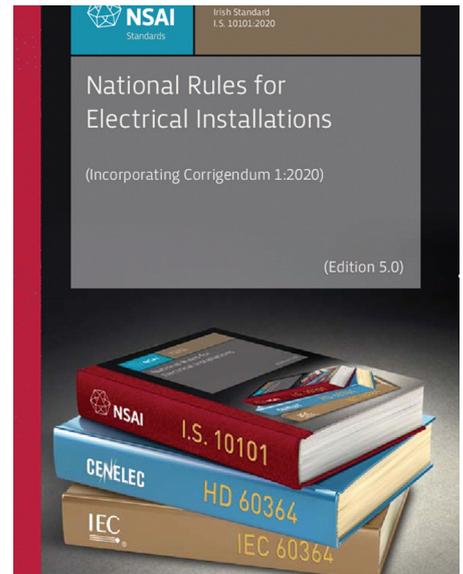
We are currently at the stage where the design date is critical because installations which were designed prior to the 1st of February 2021 and will be certified before to 31st of July 2022 can still be constructed in accordance with E.T. 101 2008.

Safe Electric will look for written conformation to verify the design date, this could be a set of electrical layout drawings which are dated.

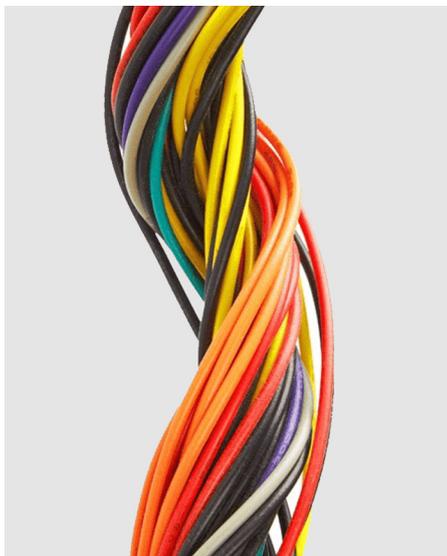
Safe Electric will not process certificates for installations that are not in compliance with the transition timelines set out above.

It is the responsibility of the REC undertaking the works to ensure they certify to the correct standard and within the correct timeframe.

Where RECs submit certificates to the old standard after these deadlines, Safe Electric will not process the certificate and the REC will be required to bring the installation into compliance with the new standard – IS 10101:2020



We are receiving reports that some electrical suppliers do not have stock of cables which comply with the I,S. 10101 standard. **If during an inspection it is identified that the wrong cable has been installed in an installation it will not be acceptable to claim that suppliers did not have the correct cable in stock**



SIX NEW FIRE REACTION CLASSES

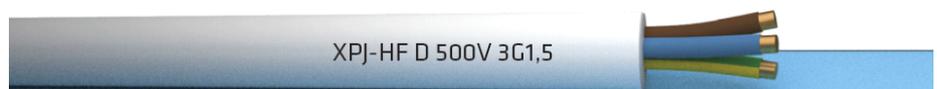
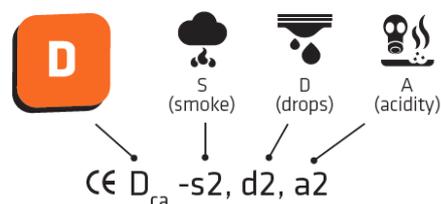
FIRE REACTION



Construction products regulation includes seven new safety classes from A to F, where A represents a non-flammable product and F a product, whose fire reaction properties cannot be determined. According to the new classification, cables usually belong to B, C, D and E class.

There are also additional criteria which determine the requirements of quantity of smoke emitted during combustion, falling droplets created during combustion, acidity of the smoke and electrolytic conductivity.

D = class | ca = cables (wires) | s = smoke | d = drops | a = acidic environment



CRU Guidance Note

For RECs Working on Distribution Boards of Existing Installations



An Coimisiún
um Rialáil Fóntais

Commission for
Regulation of Utilities

Domestic Electrical installation work

RECs working on existing distribution boards shall take cognisance of the distribution board in its entirety. The following, non-exhaustive, items shall be reviewed while undertaking this work;

- Adequate size of meter tails;
- Earthing Arrangements-
- Main Protective conductor verified,
- Earthing conductor (To Earth Electrode) verified
- Main, Supplementary and local equipotential bonding verified
- Check terminals are tightened to correct torque (check with manufacture, look at purchasing torque screwdriver);
- Check fuse holders are tight with correct gauge ring fitted;
- Avoid cutting out of distribution board covers and utilise existing top/rear entry for routing of new cables;
- All voids are appropriately fitted with blanking plates;
- Withdrawn or notified faulty devices are replaced, (E.g. DZ3 fuses withdrawn, and faulty switch fuses) Should any of the above or other hazards identified remain to be of sub-standard the REC shall issue a Notice of Potential Hazard form to the customer, as per section C clause 4.7 of the criteria document?
- When completing certificate No.3 RECs are required to insert values for insulation resistance, fault loop impedance, Z_e , and RCDs/RCBOs. These values shall be transcribed from the associated test record sheet. Where RCDs/RCBOs are existing and not installed by the REC, these shall be tested and details completed within the RCD parameter section of the certificate and referenced (via *) in the comments section stating there are existing device and have not been newly installed.



Example; the installation or removal of a lifestyle choice prepayment meter requires the supply to be de-energised, disconnected, reconnected and re-energised. This will require testing of downstream devices and the relevant data recorded on an associated test record sheet and on accompanying Certificate No. 3.

This includes all tests as listed in I.S. 1010 National Wiring Rules current addition, for example, Insulation resistance test of the cables installed, Supply loop impedance testing, Z_e , testing of RCDs downstream of the new/modified works, and polarity verified.

The inclusion of 'N/A' ensures that a box on the certificate cannot be left blank or empty. It is not a means for a REC to avoid performing a test.

Where the work undertaken by a REC does not directly involve working on the RCD circuitry but is working on the distribution board, they are required to undertake the RCD test in accordance with Part 6 of the National Wiring Rules for Electrical Installations.

Commercial/Industrial Electrical Installation Work

Where a REC is working on a distribution board and sub distribution boards are downstream of the distribution board being modified, RCDs contained within the distribution board being modified shall be tested in accordance with Part 6 of I.S. 10101 2020, National Wiring Rules for Electrical Installations, where possible.

Where it is found that circuits cannot be de-energised in order to test RCDs the REC shall note the reason why RCDs/RCBOs were not tested in the comment section of certificate No.3. It should also be recommended to your client/point of contact that all other RCDs be verified as

soon as possible or during the next Periodic Inspection of the premises.

Compliance and Co-operation by the REC

Registered Electrical Contractors are required to comply with the above listed requirements, which have been introduced in the interests of safety. Safe Electric will oversee the implementation of these requirements to ensure full compliance.

FAQ

Q I am wiring an extension to an existing installation will it need to comply with the I.S. 10101 standards i.e., surge protection, Dca ,s2d2,a2 cable?

A Yes, all new work designed and constructed after the 1st of February 2021 must comply with I.S. 10101. Cables complying with the new requirements, surge protection for the new circuits and RCD protection for domestic lighting circuits etc. should be included.

Q My wholesaler is not stocking the Dca-s2-d2-a2 cable can I use the existing cable until they get it in?

A No, you must use the new cable in all new installations designed from 01/02/2021 which will be certified to I.S. 10101

Q Can I take a supply for my car charger from the ESB meter cabinet?

A NSAI Electrical Technical Committee TC 002 have agreed to allow EV chargers to be connected at the meter cabinet for existing installations.

Q Can I wire my metal shed using a TT earthing system?

A No in Ireland TNCS is recognised earthing system.

Q What is the recommended way to comply with RCD requirements for lighting circuits?

A Safe Electric recommend a separate RCBO (6 amp) for each lighting circuit.

Q Do I need a local isolator for my E.V charger?

A Yes, NSAI Electrical Technical Committee TC 002 have clarified this is required.

Q My Qualified Certifier (QC) status is about to expire, and I can't get a course because of the Covid-19 restrictions.

A QCs that expire since March 2020 when the current restrictions were introduced we be granted an extension upon conformation of booking with any of the providers on the next possible course. Current QC numbers should be provided on completion certificates once the extension has been granted. Omission of number could lead to certificates not passing the validation process.

Q The specific requirement to supplementary bond metallic sinks is no longer called for under IS 10101. Is this interpretation accurate even if the pipework to sink is metallic. Am I in breach of IS10101 if I continue to supplementary bond metallic sinks

A While the specific rule to bond a metal draining board has been removed, supplementary bonding still applies. Each metal sink draining board should be assessed by the REC to determine if it needs a bond or not ,taking into account other electrical appliances or outlets close by. Particularly during re-wires where copper pipework is attached to the sink, this also be taken into account when determining whether the draining board needs supplementary bonding.

Q Do moveable garden lights require an LV transformer even though they are RCD protected?

A Yes Rule 559.11 (page 352) specifically requires that “movable luminaires outdoors” are supplied by SELV reduced voltage

559.11 Movable luminaires outdoors

Movable luminaires outdoors, such as those used for illumination of gardens and patios, shall be supplied at SELV in accordance with Clause 414.

Grant Information for upgrading Electrical Installations

This article provides information for Registered Electrical Contractors (REC's) to give to the customers in relation to grants available to them for upgrading Electrical Installations.

When will this be relevant to RECs?

RECs will encounter existing electrical installations that are in need of upgrading.

In extreme cases substandard electrical installations may require a complete rewire.

This could happen when:

- they respond to emergency calls
- they are installing additional new circuits and equipment in existing property's

It is particularly relevant at the moment as ESB Networks are carrying out a programme of upgrading existing meters with smart meters,

Many installations could be occupied by elderly people or people with limited means or no knowledge of building and the legislation. It is difficult then for the REC to issue a 'Notice of Hazard' which has safety and financial implications, for the client and can be a shock for the client as well.

What can be done to make this easier for both client & REC?

The following information regarding available grants might be helpful for RECS to give to customers who need to upgrade their electrical installations. They could give them this information along with the Notice of Hazard. A leaflet with the information and links to the relevant website would be very handy.

The Housing Aid for Older People Scheme is used to improve the condition of an older person's home. In general, it is aimed at people 66 years of age and older, who are living in poor housing conditions. However, in cases of genuine hardship the local authority may assist people under age 66. This scheme is administered by the local authority/County Council (look at the Local Authority's website for details)

The type of work that is grant aided can include some or all of the following:

- Structural repairs or improvements

- Dry-lining
- Repair or replacement of windows and doors
- The provision of water, sanitary services and heating
- Cleaning and painting
- Radon remediation
- Re-wiring
- Any other repair or improvement work considered necessary.

Housing Aid for Older People Scheme

Many older people may be eligible for the Housing Aid for Older People Scheme. However, priority will be given to people based on financial need. This is a means tested scheme.

Application forms are available from the all local authorities. The work must be authorised by the local authority prior to commencement. Any work completed will not be paid retrospectively.

The maximum grant available under the Housing Aid for Older People Scheme is €8,000, which may cover 95% of the approved cost of works.

Social welfare recipients

Alternatively, those in receipt of a social welfare payment could approach their local Community Welfare Officer for help with any unexpected costs which may arise. This can be done under the Supplementary Welfare Scheme using an application for an Extraordinary Needs Payment.

Electrical installation modifications

Registered Electrical Contractors need to be aware that when adding to or modifying any electrical installation, rule 134.1.9 of I.S. 10101 requires that consideration is given to the effect of the additional load on the existing installation. A good example of this is when adding an electric shower or an EV charger to an existing installation, the existing meter tails must be checked to ensure they can handle the increased load, and the bonding arrangements must be satisfactory. If the tails are less than 16 mm sq. or the bonding is inadequate, they must be upgraded as part of the shower or charger installation.

Extract from wiring rules IS10101:

134.1.9 In case of an addition or alteration to an existing installation, it shall be determined that the rating and condition of existing equipment, which will have to carry any additional load, is adequate for altered circumstances. Furthermore, the earthing and bonding arrangements, if necessary, for the protective measures applied for the safety of the addition or alteration shall be adequate.

IS10101: 134.2 & 6.4 Initial verification. Electrical installations shall be verified before being placed in service and after any important modification to confirm proper execution of the work in accordance with IS10101.

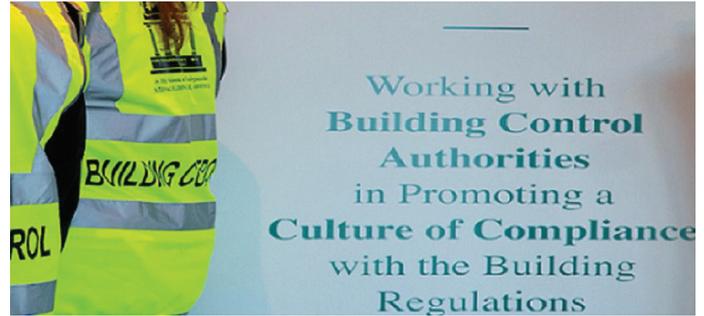
Wiring Embedded in Solid Walls or in Un-battened Dry-Lined Walls

SAFE ELECTRIC has been contacted by the "National Building Control Office" who have commented that during their standard building inspection process they are finding a lot of non-compliances with the National Rules for Electrical Installations.

These inspections will normally be carried out at the building first fix stage. In particular they have identified incorrect cable protection i.e. p.v.c. protection, for cables not installed either horizontally or vertically. The "National Building Control Office" provided the following photograph with their email

In this photograph the cable from the cooker switch to the cooker outlet is in breach of rule 522.6.5. This same rule was in the previous edition of the wiring rules. This is because the cable is not going directly either horizontally or vertically to a point and therefore should be protected by earthed metal screen. Also the cables in the stud partition on the upper left of the photo will be less than 50mm back inside the finished wall and therefore will require earthed metal screen protection.

All RECs need to be aware that they are providing certification confirming that the installation complies with the relevant wiring rules and if there is an incident or accident some time in the future that is caused by a non-conformance with the wiring rules, the installing REC will be held accountable.



522.6.5 Wiring embedded in solid walls or in un-battened dry-lined walls

Wiring embedded in solid walls or in unbattened dry-lined walls shall be protected by an earthed metal screen, armouring, metal conduit or trunking, against damage by impact or penetration by drills or nails except where the following two conditions apply:

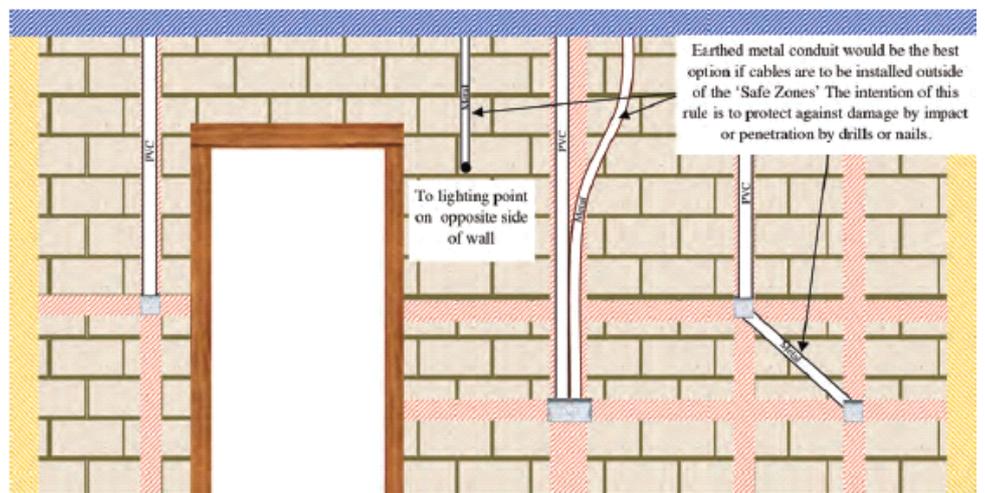
- a) The distance measured horizontally between the wiring and the reverse side of the wall is not less than 50 mm.
- b) The wiring is installed:
 - in a straight vertical or horizontal run going directly to a point, accessory or switchgear mounted on a wall, or
 - within a vertical distance of 150 mm from a ceiling, or
 - within a horizontal distance of 150 mm from a corner formed by two adjoining walls.

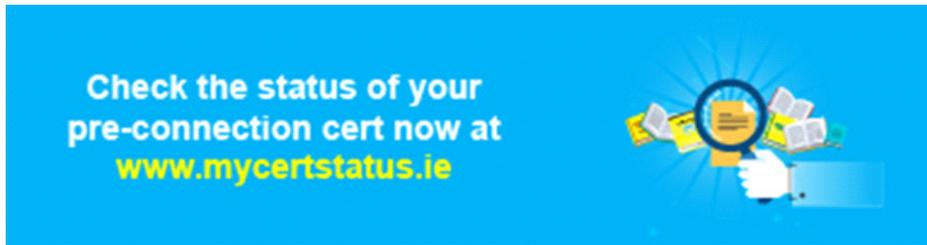
Embedded wiring shall also be protected against harmful substances present in plaster or concrete, see 522.5.4.

Wiring embedded in solid walls or in unbattened dry-lined walls shall be protected by an earthed metal screen, armouring, metal conduit or trunking, against damage by impact or penetration by drills or nails except where the following two conditions apply:

- a) The distance measured horizontally between the wiring and the reverse side of the wall is not less than 50 mm.
- b) The wiring is installed:
 - in a straight vertical or horizontal run going directly to a point, accessory or switchgear mounted on a wall, or
 - within a vertical distance of 150 mm from a ceiling, or
 - within a horizontal distance of 150 mm from a corner formed by two adjoining walls.

explanatory drawing
previously printed in our
August 2016 Newsletter





Remember all RECs and their customers can track the progress of paper completion certificate on our certchecker website at <https://www.mycertstatus.ie/>



Please check out our Webinars at https://www.youtube.com/channel/UC7cPcNOa7_uzTlg7Gjn6rxQ

Safe Electric are bringing you a series of short informative videos to help you learn more about the changes in the National Wiring Rules for Electrical Installations I.S. 10101:2020

In episode 1, Inspection Manager, Dave Butler along with Safe Electric Inspectors John Cotter & Seamus Greene discuss:

- Enhanced Cable Specifications to Comply with I.S. 10101:2020
- Additional RCD Protection in Domestic Dwelling
- Changes to Heights/Locations For Distribution Boards

In episode 2, Inspection Manager, Dave Butler along with Safe Electric Inspectors John Cotter & Seamus Greene discuss:

- Arc Fault Detection
- Surge Protection
- Metal Sink Bonding
- How to – Erroneous Test

In episode 3, Inspection Manager, Dave Butler along with Safe Electric Inspectors John Cotter & Seamus Greene discuss:

- Chapter 6 of I.S. 10101 which deals with verification and Certification
- Specific requirements for the Continuity of Conductors
- Demonstration and importance of nulling a meter
- How to, RP+RE and Ring Main test

In episode 4, Inspection Manager, Dave Butler along with Safe Electric Inspectors John Cotter & Seamus Greene discuss

- Insulation & Resistance