

Connectivity & Products

ELECTRICAL PRODUCT CERTIFICATION SERVICES (EPCS)

AUSTRALIA AND NEW ZEALAND

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Preface

During the hustle and bustle of life, how many of us think twice about the intrinsic safety of the humble drill, oven, kettle or a myriad of other electrical equipment we use during the course of our lives. We hold on to the handle of a drill containing live electrical parts without hesitation. We take out the clothes from the washing machine assuming it will not start while our hand is in there. We willingly leave the roast cooking in the oven at high temperatures for long periods of time. We turn on the kettle assuming it will always switch off when the water reaches the boil. Electrical equipment can be dangerous, and we often take for granted the risks associated with their use have been minimised to an acceptable level. Of course, behind the scenes a crucial mechanism operates to ensure the risks associated with electrical equipment are always kept at an acceptable level.

The Electrical Safety Regulatory Authorities in each State and Territory of Australia administer legislation aimed at preventing the supply and sale of unsafe electrical equipment. Electrical Equipment must not be supplied unless it complies with essential safety requirements. These requirements are set out in standards which ensure that electrical equipment is constructed in accordance with good engineering practice with regards to safety such that it does not endanger the safety of persons, domestic animals or property, when properly installed, maintained and used in applications for which it was made.

The majority of electrical equipment for household and similar use is classified as Risk Level 3 equipment / Declared Article and requires approval by a competent third party such as SGS Electrical Product Certification Services (SGS EPCS) or one of the State Regulatory Authorities prior to supply and sale in Australia. The supplier may present a compliant test report as a means of demonstrating their electrical equipment meets essential safety requirements to obtain such an approval

It is necessary to obtain approval in one state of Australia only and this approval is then valid throughout all states and territories of Australia under Mutual Recognition legislation and New Zealand through the Trans-Tasman Mutual Recognition Agreement.

Although electrical equipment, which is not Risk Level 3 / Declared, does not require approval, the supplier is still responsible for ensuring that the equipment meets essential safety requirements. As such, suppliers can submit equipment on a voluntary basis to ensure their equipment meets an acceptable level of safety. Where testing and/or voluntary approval is not sought the supplier is still liable for the safety of the electrical equipment.

To obtain approval, it is up to the supplier to provide the required documentation (refer *application for certification*). EPCS then reviews this documentation and once we have satisfied ourselves on the basis of the documentation provided the electrical equipment complies with essential safety requirements and demonstrates the electrical equipment is electrically safe (as required by the Electrical Safety Act 2002), you will be issued with a secured electronic copy of certificate as your evidence of compliance. You will then be authorised to mark the equipment before you go to market.

There are ongoing responsibilities in the process. It must be remembered that all electrical equipment supplied for use must comply with essential safety requirements, not just the one representative sample which was provided for testing and certification but all samples that are sold thereafter. Herein lies the challenge after obtaining your approval, to ensure that there are no unapproved modifications by the manufacturer, component supplier etc, which might alter the intrinsic safety characteristics of the electrical equipment leaving you with unapproved electrical equipment.

Please ensure you manage Electrical Product Safety effectively, as failure to do so, could have and has had, serious legal, economic, and humanitarian consequences.

Sgs Electrical Product Certification Services (SGS EPCS)

SGS Australia Pty Ltd is an Product Conformity Assessment body accredited by the Joint Accreditation Service of Australia & New Zealand (JAS-ANZ) under AS/NZS ISO/IEC 17065 and recognised by the NSW Gas and Electricity (Consumer Safety) Act / the NSW Recognised External Approval Scheme (REAS) for electrical equipment.

JAS-ANZ conducts a regular audit every twelve month, during which they verify the technical decision side of SGS EPCS. This includes the competency of key staff, the quality system against AS/NZS ISO/IEC 17065, the paper trail to issue the certificate and any potential conflicts of interest.

Queensland Electrical Safety Office and New South Wales Office of Fair Trading conducts a regular audit on SGS EPCS to ascertain compliance with the regulations.

Certificates issued by SGS EPCS are in accordance with JAS-ANZ, EESS requirements and REAS condition where applicable. SGS EPCS will also adhere to any rulings, interpretations or other guidance material issued by the regulator or as published on a website by the regulator.

The certification service offered by SGS EPCS is based on a Type 1a Product Certification Scheme (i.e., a representative sample which was provided for testing and certification) and does *not* include any surveillance activities or ongoing quality control for your equipment.

The SGS Electrical Type Test Scheme covers Electrical Equipment Safety in the following areas

1. In-Scope Electrical Equipment as defined in the EESS Equipment Safety Rules
2. Electrical Equipment as defined in the NSW OFT Gazette
3. EESS Not in-Scope & NSW Non-declared Electrical Equipment

Note:

- a. References may also be made to AS/NZS 3820 when reviewing equipment for Certification.
- b. Equipment as covered under item 3 is classified as a non-prescribed item.

Consumer electrical equipment as supplied in Australia under EESS

In-scope electrical equipment

Electrical equipment with a rated voltage of Greater than 50 V AC RMS or 120V ripple-free DC, and Less than 1000V AC RMS or 1500V ripple-free DC and is designed or marketed as suitable for household, personal or similar use.

- to be
- Risk Level 3 (high risk) - Electrical Equipment as defined in Annex B of AS/NZS 4417.2 which is required certified and registered on the EESS national database before being placed on the market.
 - Risk Level 2 (medium risk) - Electrical Equipment as defined in Annex B of AS/NZS 4417.2 which is required to have a compliance folder and be registered on the EESS national database before being placed on the market.
 - Risk Level 1 (Low risk) - Electrical Equipment which is neither Risk Level 3 nor Risk Level 2 equipment.

Consumer electrical equipment as supplied in Australia under REAS

Declared Article

Electrical equipment as defined in the NSW OFT Gazette which requires approval before sale.

Consumer electrical equipment Not EESS in-scope and NSW Non-declared as supplied in Australia under JAS-ANZ

Electrical equipment not covered by the NSW OFT gazette and not EESS in-scope where certificate is voluntary.

Application of standards

Certification is applicable to equipment, which complies with the relevant Standard/s or where special considerations are presented and it is deemed that the equipment will not create an unsafe situation for the user, installer, repairer, or installation.

The Certification is based on the following order of application of Standards:

1. AS/NZS Standards as published by Standards Australia.
2. International Electrotechnical Commission (IEC) based equivalent Standards.
3. European Norm (EN) Standard based on IEC.
4. ANSI recognised Standards as published by Underwriters Laboratory (UL) or Canadian Standards Association (CSA) Standard based on IEC.
5. Any National Standards that show equivalence to IEC Standards.

Note: When using International Standards, Australian/New Zealand national deviations will be required where applicable.

Relevant Standards Applicable to Risk Level 2 and Risk Level 3 Electrical Equipment:

- (a) As defined in Annex B of AS/NZS 4417
- (b) Chosen by the responsible supplier and accepted by a Regulatory Authority as a standard that can be readily applied to the type.
- (c) Alternate Solution Standard Report (refer clause 8.3.2 in EESS Equipment safety rules)

Relevant Standards Applicable to NSW Declared Article:

- (a) As defined in the NSW OFT Gazette

Relevant Standards Applicable to Electrical Equipment other than Risk Level 2 and Risk Level 3:

- (a) Standards Australia or joint Standards Australia and Standards New Zealand standard that applies specifically to the type together with AS/NZS 3820 (Essential safety requirements for electrical equipment); or
- (b) If there is not a Standards Australia or joint Standards Australia and Standards New Zealand standard that applies specifically to the type, an IEC standard that applies specifically to the type (with testing to cover a supply voltage range including 240Vac) together with AS/NZS 3820; or
- (c) AS/NZS 3820 if neither paragraph (a) nor (b) applies

Where an amendment is made to a relevant standard or a new edition of a relevant standard is issued, as indicated in Clauses 10.2 and 10.3 of the EESS Equipment Safety Rules, Responsible Suppliers that have registered Risk Level 2 or Risk Level 3 electrical equipment will be advised by EESS if the changes involved require an updated Test Report, or certificate if one has been issued.

Note: New ordered stock not yet manufactured shall comply with the amended Standard.

Certificate types

Certificate of Conformity

A certificate issued for EESS Risk Level 3 electrical equipment as defined in Annex B of AS/NZS 4417.2 or for declared electrical equipment as defined in the NSW OFT Gazette that is proven to comply with the relevant standard/s and where the evidence provided demonstrates the electrical equipment is electrically safe

Certificate of Approval

A certificate issued for NSW Declared Article as defined in the NSW OFT Gazette
** EESS rules followed for all Current Certificate of Approval issued by SGS EPCS

Certificate of Suitability

A voluntary certificate issued for electrical equipment which is not EESS Risk Level 3/ NSW Non-declared that is proven to comply with the relevant standard/s and where the evidence provided demonstrates the equipment is electrically safe.

Issuing of certificates

Certification will be granted based on:

- (a) Completion of the Application for Certification (form EPCS-F01).
- (b) Signing of Declaration by Applicant or Authorised Representative (form EPCS-F01).
- (c) A letter of authorisation signed by the applicant if the application is made by Authorised Representative on their behalf.
- (d) Provision of a Compliant Test Report (refer to *Acceptance of Safety Test Reports*).
- (e) Provision of detailed colour photographs (refer to *Acceptance of Safety Test Reports*).
- (f) Review of technical documentation.
- (g) The evidence provided demonstrating the equipment is electrically safe (as required by the Electrical Safety Act 2002).

The applicant will be advised if there is insufficient information.

When a certificate is issued to the applicant, the equipment may be marked with the authorised marking as specified on the certificate.

It is the sole responsibility of the applicant to ensure all Electrical Equipment offered for sale, are identical to that certified.

The certificate holder should maintain a file that records all complaints made known to the supplier relating to an equipment's compliance with the requirements of the applicable Australian Standard and take appropriate action with respect to such complaints and any deficiencies found in products or services including documentation of these. This record must be made available to the certification body if requested.

If the electrical equipment is modified in any way the certificate holder is required to notify EPCS of the details of the modifications for approval. Form EPCS-F01 must be completed and submitted detailing the changes.

At all times the applicant shall be bound and must ensure conformity with Australian State & Territories Legislation covering Declared Electrical Equipment if applicable and will additionally be subject to those conditions and penalties.

The contents of certificates

SGS EPCS will maintain a Register of Certificates issued.

Each Certificate will be legible, written in English and give the following information:

1. Name and contact details of the certificate holder
2. The date of issue of the certificate
3. The Term of validity of the certificate
4. A description of the item of electrical equipment or family of electrical equipment
5. Model number(s) and brand/trade name(s)
6. Electrical rating (Volts, Amps, Frequency, Wattage or VA)
7. The risk class applicable
8. The relevant standard
9. Any conditions placed on the issuing of the certificate
10. Each individual model number (as it will be displayed on the nameplate of the electrical equipment) of the electrical equipment covered by the certificate
11. Type of Certificate (Certificate of Conformity, Suitability)
12. The authorised marking can be applied to the equipment to evidence the certification

13. JAS-ANZ Logo including the current URL
14. SGS Logo
15. Unique Certificate Number
16. Approved Signatory's Signature

A Certificate is renewable after its issue date (refer to RENEWAL OF CERTIFICATION).

Relevant equipment certification details are uploaded onto the certification database within three days of issue of the certificate. Certification records are retained from date of certification for ten years.

Application for certification

Applications for certification of electrical equipment shall be lodged with Electrical Product Certification Services and should include at least the following:

- (a) A completed and signed Application for Certification form (EPCS-F01)
- (b) The correct application fee (non-refundable)
- (c) A test report showing conformance of the equipment to the relevant Standards. (refer to *Acceptance of Safety Test Reports*)
- (d) Rating label(s), unless covered by the test report
- (e) Information explaining the variations between the different models to be listed on the certificate, unless covered by the test report
- (f) A model identity declaration if the test report lists a different model number and/or trade name to that which will be on the equipment that will be manufactured and supplied
- (g) Copies of Certificates of Conformity for any Risk Level 3 components (such as plug, cord, appliance connector etc.) unless covered by the test report
- (h) Equipment sample(s) if requested (in the absence of detailed, colour photos)
- (i) Any additional technical information

All submitted samples will be disposed of 14 days after Issue of Certification without any further notice to the applicant.

The applicant's attention is drawn to SGS General Conditions for System, Product and Service Certification and SGS Codes of Practice which are to be read in conjunction with this document. The most current issue is available on request.

All correspondence should be addressed to:

SGS Australia Pty Ltd – C&P Electrical Product Certification Services (EPCS)
10/585 Blackburn Road
Notting Hill, Victoria, 3168
Australia

Additional information regarding all applications

- a) The client is to always fulfil the certification requirements, including implementing appropriate changes when they are communicated by SGS EPCS.
- b) If the certification applies to ongoing production, the certified equipment continues to fulfil the equipment requirements.
- c) The client makes all necessary arrangements for:

- 1) The conduct of the evaluation and surveillance (if required), including provision for examining documentation and records, and access to the relevant equipment, location(s), area(s), personnel, and client's subcontractors.
 - 2) Investigation of complaints.
 - 3) The participation of observers, if applicable.
- d) Claims made by the client regarding certification must be consistent with the scope of certification.
- e) The client must not use its equipment certification in such a manner as to bring SGS EPCS into disrepute and does not make any statement regarding its equipment certification that SGS EPCS may consider misleading or unauthorized.
- f) Upon suspension, withdrawal, or termination of certification, the client must discontinue its use of all advertising matter that contains any reference thereto and takes action as required by the certification scheme (e.g., the return of certification documents) and takes any other required measure.
- g) If copies of the certification documents are provided to others, the documents shall be reproduced in their entirety or as specified in the certification scheme.
- h) In making reference to its equipment certification in communication media such as documents, brochures or advertising, the client must comply with the requirements of SGS EPCS or as specified by the certification scheme.
- i) The client must comply with any requirements that may be declared in the certification scheme relating to the use of marks of conformity, and on information related to the equipment.
- j) The client must keep a record of all complaints made known to it relating to compliance with certification requirements and makes these records available to SGS EPCS when requested, and:
- 1) Takes appropriate action with respect to such complaints and any deficiencies found in equipment that affect compliance with the requirements for certification.
 - 2) Documents the actions taken.
- k) The client must inform the certification body, without delay, of changes that may affect its ability to conform with the certification requirements.

Examples of changes can include the following:

- The legal, commercial, organizational status or ownership,
- Organization and management (e.g., key managerial, decision-making, or technical staff),
- Modifications to the the production method,
- Contact address and production sites,
- Major changes to the quality management system.

Modification of certified equipment

Modifications (including technical and non-technical changes) refer to any change made to the Certified Equipment or Certificate. Typical changes include:

1. Change of components, materials, or equipment design.
2. Change of Manufacturer. (Alternative manufacturer details must be shown on the test report)
3. Change of Rating.
4. Addition of equipment of the same family in the form of a new model or option.
5. Change of Catalogue or Model Number.
6. Change of Trade Name.

Where an application for Modification is requested, the applicant shall submit a completed EPCS-F01 form detailing the changes, along with the appropriate fee.

The applicant may seek advice from SGS EPCS to determine whether re-certification is required as a result of the change(s).

Certificate of a Modification Addendum is valid only for the remaining duration of the original equipment certification.

When a modification certificate is issued to include additional equipment, the equipment shall fall within the definition of 'family' as per EESS Equipment Safety Rules and shall comply with the relevant standard/s listed on the certificate.

The Certificate Holder shall update the Technical File with the relevant details.

Note: Where a Model Number has been approved based on a technical review/assessment and there is a change to the Technical Report of the equipment, but the same Model Number is kept, then the original technical review lapses and a new review must be undergone. The original Model design is no longer approved and therefore cannot be used. In this case, the Certificate Holder is to advise all stockholders that the Certification has lapsed.

Renewal of certification

A Certificate is renewable after its issue date.

The applicant shall complete form EPCS-F01 and provide details of any changes, including design, material, construction, or place of manufacture from the previously certified electrical equipment.

Where a Standard or Specification has been amended or revised, for renewal of a certificate, only those tests which are new, will apply.

Withdrawal of certification

A Certificate may be withdrawn by SGS EPCS at any time for a breach of any conditions herein.

Where withdrawal occurs due to breach of conditions herein the applicant shall ensure all certificates are returned to SGS EPCS and there shall be no reference to the Certification in advertising of Equipment with withdrawn certificates.

Re-instatement of withdrawn Certification is subject to satisfactory completion of a full review of intended method of resolution of Non-conformance, either Technical or Administrative.

The review is conducted by SGS EPCS. Documented advice signed by the applicant is to be received by SGS EPCS before any action can occur.

SGS EPCS will upon the withdrawal of Certification for reasons other than expiry, invoke the process outlined at the Consumer Affairs Division of the Federal Treasury and inform ERAC.

Acceptance of safety test reports

Refer to AS/NZS 4417.2 (Marking of electrical es to indicate compliance with regulations Part 2: Specific requirements for electrical safety regulatory applications) and EESS Equipment Safety Rules for acceptance of Safety Test Reports.

In general, a Safety Test Report shall be the original or a certified copy of one of the following:

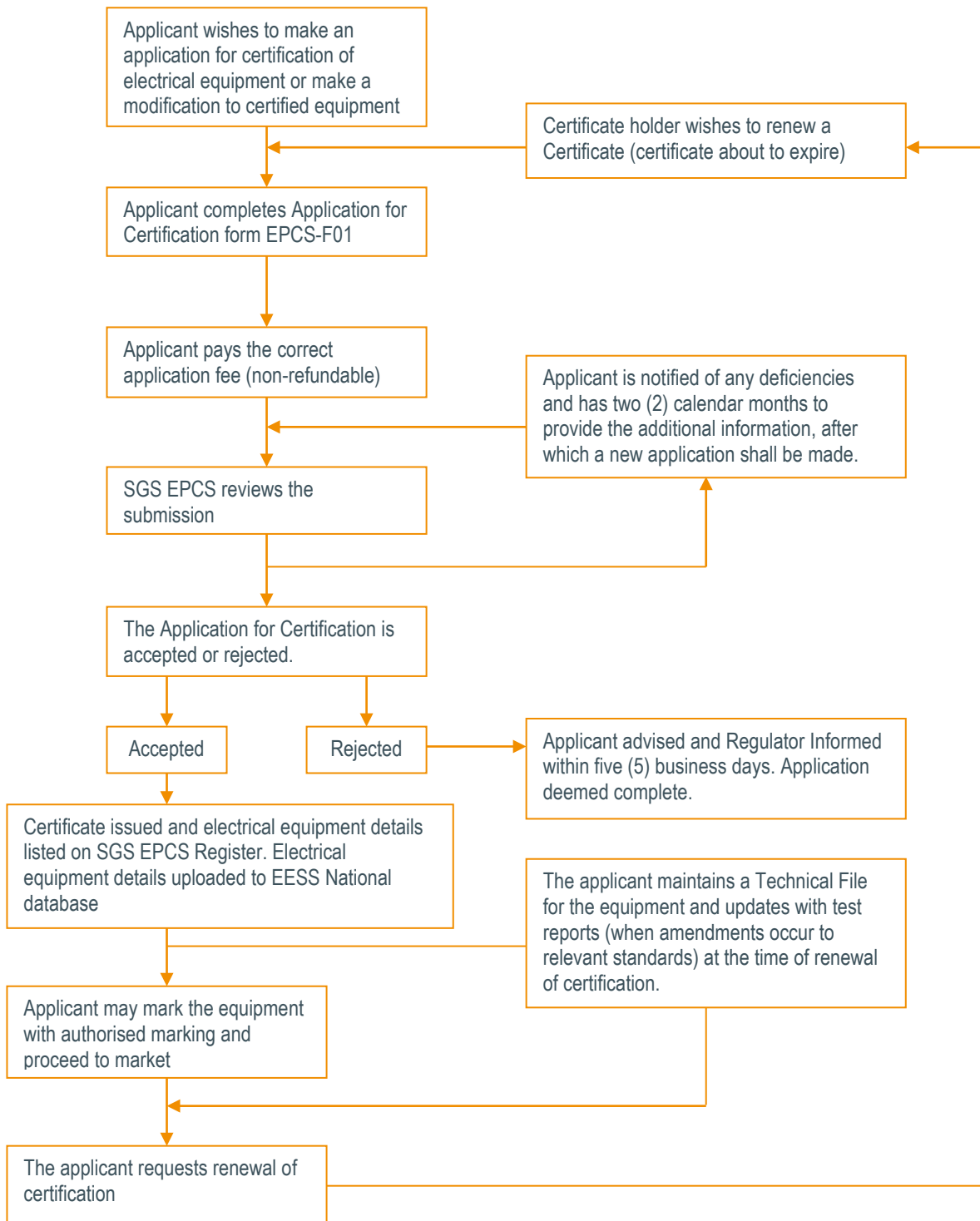
1. A NATA (National Association of Testing Authorities Australia) endorsed report or an endorsed report from a laboratory with which NATA has a mutual recognition agreement. Refer to ILAC (International Laboratory Accreditation Cooperation) register on the NATA web site.
2. A CB test report and certificate issued under the IECEE CB (IEC System for Conformity Testing & Certification of Electrical Equipment Certification Body) Scheme. CB Test Reports are required to be accompanied by CB Test Certificates for all situations.
3. A report from a testing laboratory which is determined by all relevant Regulators to meet standards of competency not inferior to those embodied in 1 and 2 above.

In general, the following requirements also apply for Safety Test Reports to be deemed acceptable:

1. The Test Report in English.
2. The Test Report relates to the submitted equipment.
3. The Test Report covers testing to relevant Safety Standard/s or alternative solution standard/s and/or the EESS Website and will be of a form that includes all clauses and sub clauses and results for each.
4. The test report shall have the required accreditation identification as stipulated by the ILAC/APLAC laboratory accreditation body, or as required under the IECEE CB Scheme.
5. The Test Report must include full technical details and testing results.
6. The Test Report covers all models (base model and model variations) and explains which tests were applied to which models.
7. Where there are non-compliances or clauses not assessed, there should be accompanying information to show how the equipment will comply with those requirements.
8. Critical components are required to be tested and be provided with Test Reports and/or Certificates that detail their compliance with the relevant Standards or be marked with Certification body marks.
9. The Test report shall not be valid where their age is beyond any expiry date listed on the test report and/or exceeds the issued date by more than five years unless specified by a Regulator. It may be accepted where the report has been updated by a test facility or suitably qualified person to verify no components have changed in the equipment and no changes have occurred to the standard that affect the compliance of the equipment to the current relevant standards
10. The Test Report must include detailed colour photographs. In general, they should include:
 - a) a complete view of the equipment (external sides, top and bottom);
 - b) name plate (or artwork);
 - c) warning labels on the equipment and/or indicator marks;
 - d) close-up of control and switch;
 - e) close-up of plug (including markings) or a copy of the relevant Certificate of Conformity;
 - f) Cord markings or a copy of relevant Certificate of Conformity
 - g) cord entry into the equipment;
 - h) overall internal layout including wiring and component locations;
 - i) close-ups of the incoming supply cord / cord anchorage / supply terminal block / earth connection; and
 - j) markings on critical components (switches, capacitors, transformers etc.).

Note: A sample of the equipment for which the Certificate is sought may need to be submitted for examination. This requirement may be waived when the Test Report and/or documentation clearly identifies the product.

Process to certification - flow diagram



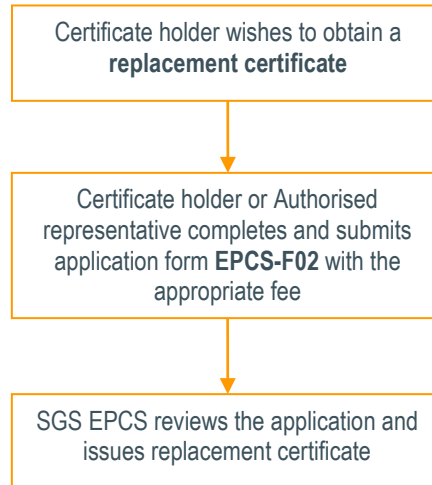
Note 1: It is the sole responsibility of the applicant to ensure all equipment offered for sale, is identical to that certified. The regulator will be notified within five days if SGS EPCS become aware of equipment that no longer meets the conditions of an issued certificate.

Note 2: At all times, the applicant shall be bound and must ensure conformity with Australian State & Territories Legislation covering Declared Electrical Equipment if applicable and will additionally be subject to those conditions and penalties.

Replacement certificate

A replacement certificate may be re-issued by SGS EPCS to the Certificate holder at the request of the Certificate holder or Authorised Representative.

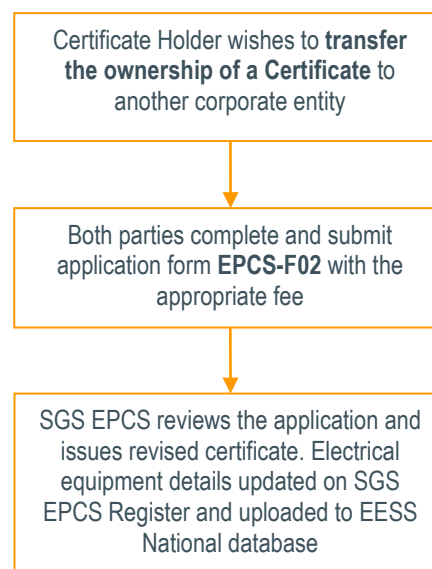
Process to Replace Certificate – Flow diagram



Transfer of certificate

The ownership of a certificate may be transferred to another corporate entity. The certificate cannot be transferred except with consent of both parties.

Process to Transfer Certificate – Flow diagram



Change in particulars of the certificate holder

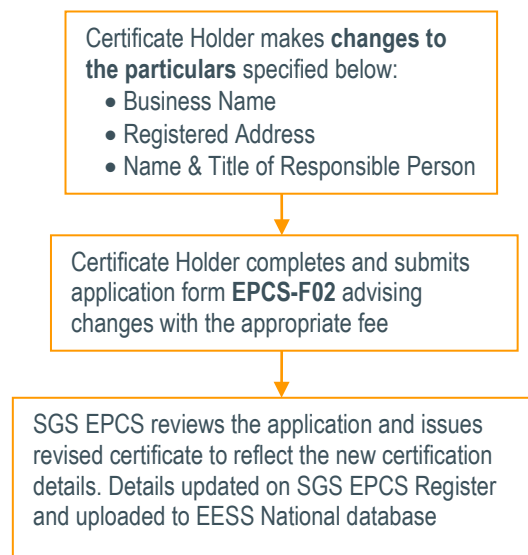
In cases where the particulars of the certificate holder specified below change, the holder is required to notify SGS EPCS within 20 days of such change.

1. Applicants Business Name
(a change in name only and where the corporate entity is unchanged) *
2. Applicants Registered Address
3. Name & Title of Responsible Person

Changes to Telephone Number, Fax Number and Email address should also be provided.

Note: Where the Corporate Entity is changed, an application for Transfer of Certificate must be completed.

Process to change particulars – Flow diagram



Confidentiality

The following conditions apply to information forwarded to SGS EPCS

- During the application process, all communications, documents and Test Reports are treated as “*Commercial in Confidence*”.
- Information obtained for the regulator will be treated as confidential.
- Following Certificate issue, the only information conveyed by SGS EPCS to a party other than a Regulatory Authority is verification that a particular certificate has been issued, its validity and the Certificate details.
- Except as required in this Guide or by law, information gained in the course of certification activities regarding the equipment or supplier shall not be disclosed to a third-party without the written consent of the supplier. Where the law requires information to be disclosed to a third-party, the supplier shall be informed of the information provided as permitted by the law.
- Test results or other data which may be needed to verify, trace or identify items will be provided by SGS EPCS to the appropriate Regulatory Authority when requested by the Authority.

Schedule of fees

The current schedule of fees is available on request or can be accessed at www.sgs.com.au/epcs

A priority service is available subject to work load.

Payment can be made by EFTPOS, Credit Card (Visa & MasterCard), Cheque or Client Account (subject to approval).