Surveillance Inspection Form Instructions

ICC-SRCC Surveillance Inspection Form - Rev. 6

PURPOSE

The ICC-SRCC Surveillance Inspection Form must be completed by an inspector assigned by ICC-SRCC who examines a quality management system previously assessed by ICC-SRCC. It builds on the information baseline of a previous Qualifying Inspection and any Surveillance Inspections that followed it. It assesses the function of the production quality system, examines changes occurring since the last inspection, and overall compliance with applicable ICC-SRCC requirements.

STRUCTURE

The form is divided into several sections. Sections 1-4 provide a summary of the inspection with the type, date, parties involved, location, and products covered. It also includes an executive summary of the inspection to be completed at the end of the inspection. Space is provided for signatures of the lead inspector and listee or manufacturer representative at the end of Section 4.

Section 5 contains the detailed checklists used to assess the Quality System and implementation in production facilities and processes. Section 5, Part A, examines the Quality System used for the certified product. It checks the implementation the of policies and procedures and is primarily a document review exercise. It can be completed prior to an in-person inspection at the discretion of the inspector. Part B examines the implementation of the incoming goods and materials processes and their adherence to the policies and procedures in Part A. Part C reviews the implementation of the quality system in production and assembly. Part D consists of a traceability study of at least one selected product to examine it in more detail.

There are three Appendices that provide additional forms for use in the report as needed. If there are non-conformities documented, they are to be individually summarized on the form in Appendix A and provided with the report. Appendix B provides a form for the entry of the key documents reviewed during the inspection process. Appendix C provides a form for the entry of additional products, if there are more than 12 (the limit that can be entered in Section 2). Each of the Appendix Forms may be duplicated to provide additional room for entries as needed. For the PDF version of the inspection form, the appendices are provided as separate PDF documents for use as needed.

INSPECTION FORM INSTRUCTIONS

The following sections are organized in the same way as the form, providing additional information and resources on each to aid the inspector. In several locations, references are provided to sections in the *ICC-ES Acceptance Criteria for Quality Documentation (AC10)*. These are provided for guidance purposes only.

1. GENERAL

This section identifies the inspection participants and details. It identifies the lead inspector, providing their contact information, other inspectors present, the date of the inspection and the type (Onsite, Remote, or both). If the inspection is conducted both onsite and remotely, check both boxes, and enter the dates of each portion. If an auditor or certification body witness is present for the inspection, they should be identified here as well.

The name of the Listee should be entered and must match the listee name on the certifications or listings entered in Section 2. The name and address of the production facility subject to inspection are also to be entered since they may differ from that of the listee in some cases. If the inspection is addressing a quality system where there is no onsite production, and the inspection is conducted remotely, enter "NA" in this section. The Primary contact for the manufacturer is to be designated and entered, along with their contact information. The name and titles of other attendees on behalf of the listee or manufacturer should also be entered. If the inspection is conducted entirely remotely, enter the names of all online participants here.

2. PRODUCTS COVERED

The certified and listed products subject to inspection are to be listed here. Section 2 has room for up to 12 products. If more are to be included, use the form provided in Appendix C, and attach it to the main report. Enter the certification/listing number from ICC-SRCC or ICC-SWCC and the associated program (OG-100, OG-300, OG-400, Solar Listing, Wind Listing). The manufacturer's model name or number should also be entered for each. The certifications held for solar thermal products under the ICC-SRCC program for each listee can be found in the online directory at www.solar-rating.org/directory Wind turbine listings can be found on the ICC-SWCC directory at www.smallwindcertification.org

3. INSPECTION RESULTS SUMMARY

This section should be completed at the end of the inspection, providing a synopsis of the results, number of non-conformities identified and general remarks. It should provide an executive summary of the inspection.

4. SIGNATURES

The completed inspection report must be signed by the lead inspector and a representative of the listee or manufacturer. By signing the lead inspector attests that the information is accurate to the best of their knowledge and that they have no undeclared conflicts of interest.

The signature of the listee or manufacturer's representative (in the case where the manufacturer differs from the listee) acknowledges the findings contained in the inspection report. It does not imply that they agree with all findings. They may also enter comments into the remarks section for the consideration of ICC-SRCC, separately from those of the inspector.

5. PRODUCTION CONTROL ASSESSMENT

Part A: Review of Quality System

This portion of the inspection focuses on the implementation of the quality system employed by the manufacturer for the certified products. It includes the policies, procedures and records associated with that quality system. Note that this does not necessarily require the presence of a Quality Manual on an ISO 9001 process (although both are commonly used to establish production quality control systems). The requirements listed below can be satisfied by more than one document. References are provided to AC10 to provide additional reference information. Review of these documents may be conducted prior to an in-person inspection. Regardless, steps should be taken onsite to verify the documents provided are applied in the production of certified products.

1. Basic Elements. (AC10 §2.0)
    a. The implementation of the quality management system documented previously shall be reviewed. The review should review any significant changes to the system since the last ICC-SRCC inspection. Elements to be reviewed include:
        i. Description of the manufacturing process for the certified products and all in-process quality control. (AC10 §2.1.6)
        ii. Organizational chart and description of the responsibilities of key individuals in the quality program. (AC10 §2.1.8)
        iii. Records associated with quality systems are retained for a minimum of 2 years. (AC10 §2.7.3)
    b. Confirm complaints have been processed and recorded in accordance with the established procedures. Note any significant complaints pertaining to certified products since the last inspection. (AC10 §2.1.10)
2. Design Control. (AC10 §1.4.4.1, §2.1.7) Confirm that the documents controlling the design of custom components and final assemblies are maintained and are up to date. Note any significant changes since the last inspection and ask whether these have been communicated to ICC-SRCC and other significant parties, as required. This is especially important where such changes have the potential to impact the compliance of the product with applicable codes or standards, or alter product performance, safety or durability.
3. Calibration (AC10 §2.6) Check whether policies/procedures for calibration of devices used for testing, measuring and inspection of certified products are implemented and maintained. This includes:
    a. Calibrated devices must have some identifying marking that specifically ties them to calibration records. This can take any number of forms such as etching, inscription, labels, etc.
    b. Demonstrated evidence that calibrated devices are checked and recalibrated regularly, meeting frequency requirements established in policies and procedures above. Calibration records must be maintained for a minimum of 2 years for each calibrated device. List all evaluated devices with calibration and where they are used.

4. Finished Products (AC10 §2.1.9) Confirm that quality policies and procedures for the testing, inspection and acceptance of final products are implemented and maintained. This includes:
    a. Procedures or policies that define the activities to confirm compliance with design specifications for the final product (testing, inspection, etc.) .
    b. Procedures for packaging or storage after production in preparation for shipment or transport to the installation site. Note that this may not be applicable in cases where assembly occurs in the field (e.g. OG-300 solar water heating system).
    c. Procedures are followed for the handling, segregation and disposition of non-compliant product. Products, components, or materials may be reworked or repaired, provided that it can be shown that it then meets all design specifications.

Part B: Implementation of Incoming Goods and Materials Inspections

This portion of the inspection seeks to confirm that the conduct of the incoming goods and materials inspections meet the requirements established in the policies reviewed in Part A.

Where these inspections take place at the facility being inspected, the items listed below should be verified directly at the location the inspections take place. Where these inspections take place at another facility or in the field, documentation or some other evidence should be provided to demonstrate compliance.

1. Materials and goods undergoing incoming inspections were listed in Part A. Confirm that these inspections are being carried out for each.
2. Confirm that the results of incoming inspections are being recorded in accordance with the requirements of policies and procedures evaluated in Part A.
3. Verify that devices used for measurements, inspections or tests of incoming goods are available to responsible personnel.
4. Verify that personnel responsible for incoming inspections have access to instructions to carry them out. These need not be physically present at the location of the inspection, but readily available in digital or physical form.

Part C: Implementation of Quality System in Production Processes

This portion of the inspection seeks to confirm the implementation of the quality system in the production and/or assembly processes used for the certified products. It applies whether the activities take place in the factory or in the field.

1. Confirm that instructions for either the onsite production line operation or offsite field assembly of certified products are readily available to the responsible personnel. Instructions can be physical copies or digital material readily available to personnel.
2. Devices or equipment used for required quality checks during production or for finished equipment are present or readily available. If the devices are calibrated, they comply with the requirements evaluated in Part A. For field-assembled products devices used for quality checks must be clearly identified, along with directions for their use.

3. Records of quality checks are being collected and retained. This section does not require the collection of quality information (although it is a best practice), only that the client's policies are being implemented.
4. If non-conforming products are identified, verify that they are segregated and controlled in accordance with the policies reviewed in Part A. If those policies prescribe record-keeping related to non-conforming products, confirm that it is being implemented.
5. Finished goods are handled, stored and packaged in accordance with requirements reviewed in Part A. Note that this may not be applicable to field-assembled systems, such as OG-300 solar thermal systems. However, even in that case, if custom components are produced at the facility for shipment or transport to the field for assembly, their packaging and storage are subject to this evaluation.

Part D: Traceability Study

In this part of the inspection, one specific certified product is selected for additional examination. ICC-SRCC may indicate the specific product to be reviewed. In the absence of that, the inspector should select one randomly. Enter the certification number and the model number of the product selected, along with the program to which is certified.

1. Document Control. Review the design documents (e.g. component and assembly drawings, bills of materials, parts lists, material specifications) for the product, noting the name and current revision of each. List all reviewed documents in the Surveillance Inspection Form or Appendix B if more space is required.
2. Change Management. List all recorded revisions, changes and modifications to the product design or manufacturing process since the last inspection. Inquire whether affected parties and/or ICC-SRCC were informed if they appear to be significant.
3. Manual. Confirm the availability of manuals addressing installation of the product. List the documents reviewed, and the current revision. If the manuals have been revised since the last inspection, obtain electronic copies for submission to ICC-SRCC with the report.
4. Product Marking & Labeling (AC10 §2.1.4) Confirm compliance with ICC-SRCC marking and labeling requirements for the products produced and the specific certification program. Label must include the information contained in the "Identification" section of the certification or listing report. Each certified product must be labeled with the mark and additional information below at a minimum. ICC-SRCC marks may be provided in color or black/white. Permissible marking locations are also provided. Provide example photos of marking observed where possible. If marked product is not available, request image or artwork of labels and any instructions for application of the label (in production or in the field).

Program	Certification Mark	Location	Minimum Information to be Provided
OG-100		Permanently affixed to the solar thermal collector.	From ICC 901/SRCC 100, Section 502 1. Model name and/or number. 2. Year of manufacture and/or serial number. 3. Certification number and third-party certification agency.

			4. Maximum operating pressure. 5. Dry weight. 6. Fluid volume. 7. Compatible heat transfer fluids. 8. Standard stagnation temperature.
OG-300		Permanently affixed to tank or auxiliary water heater in the field.	From ICC 900/SRCC 300, Section 402 1. Manufacturer's name. 2. Model number. 3. System listing number and third-party certification agency. 4. Collector listing number, third-party certification agency and quantity. 5. Heat transfer fluid and concentration range. 6. Storage tank volume. 7. Expansion tank volume. 8. Relief valve specification and setpoint. 9. Maximum water supply pressure. 10. Maximum solar loop pressure. 11. Flow rate range (where a flow meter is installed). 12. Backup energy rating. For electrical, include phase/volts/amps. For gas, include minimum pressure. 13. Installation date field (to be entered by the installer in the field).
OG-400	No OG-400 labeling verification required.		
Solar Listing			Determined by the specific code and/or standard used in the listing. See the "Identification" section of the listing report.
Wind Listing	No SWCC labeling verification required.		
ENERGY STAR	No ENERGY STAR mark verification required.		

6. COMPLETION AND SUBMISSION INSTRUCTIONS

1. At the conclusion of the inspection, the report should be signed by both the lead inspector and the manufacturer's representative in Section 4. The report may be signed electronically. This can be done at the time of the inspection or shortly after upon completion of the inspection report. Either way, it should not be submitted to SRCC until it has been signed.
2. Instructions are provided for the submission of the completed inspection report and accompanying materials. The report should be submitted via e-mail to ICC-SRCC at srcc@solar-rating.org for solar products and swcc@solar-rating.org for wind products.

If, however, the file sizes are too large for e-mail, contact SRCC for other options (such as Dropbox or OneDrive).

3. The inspector should provide a copy of the completed report to the listee or manufacturer's representative who signed Section 4. The copy can be either a hardcopy or electronic copy as requested.