



Procedure #1

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CRRCC procedures contain details about the CRRCC Program Rating Program that are approved by the CRRCC Board and updated from time to time. Procedures do not change the basic intent or operation of the Rating Program, but provide more detail on the operation of the program.

Random Testing Rated Roofing Products

Purpose

Section 3.6 of the CRRCC Program Rating Program Manual (CRRCC-1) calls for random testing of listed products. This procedure describes the process that will be used by CRRCC to select the rated roofing products that will be randomly tested. It also describes the procedures to physically collect samples of roofing products once they have been selected for random testing.

Section 2.2.2 of CRRCC-1 calls for round robin testing of the CRRCC accredited laboratories. In order to minimize costs, this round robin testing on labs will be coordinated with the random testing of products.

Choosing Rated Roofing Products to be Randomly Tested

A sample of products from the list of Rated roofing products (Rated Products Directory) will be randomly selected for testing each year.¹ Only products rated by a Licensed Seller, including those products such Licensed Seller is also the Licensed Other Manufacturer, are considered in the sampling procedures. This means that if a Licensed Seller has more products listed, the probability increases that one of its products will be selected.

Products will be selected at random, but the probability of being chosen increases for products not selected in previous years and listed in the directory for many years. If a product is sampled or added to the directory the previous year, then it has one chance of being picked the following year. Products that were sampled or added to the directory two years past have two chances. Products that were sampled three years past have three chances, etc. It is still be possible for products to escape sampling, but the longer they escape sampling, the more likely it is that they would be selected the next year.

Collecting Samples of Rated Products

When a Rated product is selected for random testing the samples will either be collected by CRRCC from distributors or contractors or by a third-party Quality Assurance Organization² at the point of manufacturing including from existing stock at the manufacturing site. This section of the procedure describes the methods to be used for sample collection.

Cooperating Distributors and/or Contractors

When CRRCC Licensed Sellers make an application for product Rating, they provide information to the CRRCC on distributors and/or contractors from which the CRRCC can obtain samples of their product for random testing. If the Licensed Seller does not utilize distributors, contractors shall be listed. The distributor/contractor information will be updated annually with each application for product renewal.

¹ Actual percentage is determined by the Board based on costs, operating budget and other factors.

² A Quality Assurance Organization is a third-party organization hired by the Licensee to periodically inspect their manufacturing plants to ensure quality assurance of their production process.



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Parties listed by the Licensed Seller shall agree to provide samples to CRRC at no cost and upon request. The CRRC will not be obligated for any costs (aside from direct shipping costs) incurred by distributors or contractors for their trouble in preparing samples. These costs are expected to be minimal. The burden of payment or cost (if any) for preparation and collection of samples rests with the Licensed Seller. The Licensed Seller is responsible for initial notification of listed distributors/contractors that they have been listed as potential suppliers of random testing samples. Along with their application for product Rating, Licensed Seller shall provide a generic letter requesting help in sample collection. This letter will be used by the CRRC in sample requests to distributors/contractors.

Requests for samples will be made no more frequently than once a year, unless a roofing product fails the initial test and must be retested. Whenever possible, samples will be collected from contractors. Some field-applied coatings require special equipment that mix two or more components, and thus samples of these products must be provided by contractors that have the equipment. For other products, samples are more likely easier obtained from contractors who may have product scraps left over from a project. In the event that a distributor is listed, the distributor will be used first as a contact to name current contractors using the selected product. It is also possible that the distributor may be asked to provide a sample directly.

The Licensed Seller will rank order the list of cooperating distributors/contractors. If the product is selected for sampling, the CRRC would contact the first cooperating distributor/contractor on the list and move on to the second if contacting the first would not result in provision of the requested sample within six months. The third distributor/contractor would be contacted if contact with the first and second failed to deliver.

Sample collection will take place as much as possible during the "roofing season" so it will be easier for contractors and applicators to provide samples in a timely manner. CRRC will be flexible in order to work with contractor work schedules (e.g. CRRC may have to wait until their next job for the coating sample requested).

The Licensed Seller would be notified only if the CRRC has trouble collecting a sample from any listed contractor or distributor. The Licensed Seller will then be asked either to provide the contact information for a current contractor installing their product, or to provide a sample of the product from the most recent production batch (different from the batches that were originally tested for product Rating). Alternatively, a sample may be collected from the point of manufacturing by a third-party Quality Assurance Organization.

Sample Collection by a Third-Party Quality Assurance Organization

As an alternative to collecting a sample through the listed contractors and/or distributors, the CRRC will contract with a third-party Quality Assurance Organization (QA Organization). The QA Organization will collect a product sample at the point of manufacturing during their routine plant inspection or, if there is no routine plant inspection planned, they may make a plant visit solely to collect a sample for the CRRC. In the event that the Licensed Seller is not the manufacturer of the product (the product is private-labeled for the Licensed Seller by an Other Manufacturer), the QA Organization will collect the sample from the point of manufacturing by the Other Manufacturer. The QA Organization will send product samples with appropriate labels to the CRRC. The CRRC will forward the samples to an AITL for testing.

Sample Preparation Sheet

Many different classes of products may bear CRRC labels and be listed in the CRRC directory. These include sheet goods (single-ply roofing products), shingles (asphalt, concrete, clay or metal), metal roofing panels, and field-applied coatings. The physical object to be collected for the random testing sample will vary with the class of roofing product. The roofing product sample might consist of a shingle, a roofing tile, a patch of single ply roofing, a clipping from a metal roofing panel, or in the case of field-applied coatings, a prepared sample.



Licensed Sellers will provide a one page instruction sheet on how to collect or prepare the sample. This instruction sheet will be included with the application for product Rating and labeling and will be reviewed by the CRRC and forwarded to the contractor or distributor or QA Organization that agrees to provide the CRRC with samples.

- In the case of field-applied coatings, the instructions will describe how to apply the coating to standard aluminum “blanks” to be provided by the CRRC.
- The instructions for collecting samples of other product classes will address issues such as how to take a sample without damaging the product and how to obtain a representative sample. In the case of sheet goods, metal roofing products, shingles and tiles, the instructions will describe how to select a representative sample of the product and package it for safe transport.

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Cooperating distributors/contractors, or the QA Organization’s representative, will label each sample with labels provided by the CRRC. However, paper labels may not stick to all samples. For samples of metal roofing products, for instance, it may be necessary to punch a hole and attach a string-tied label. These labeling details will be addressed as part of the sample collection instructions to be provided by the Licensed Seller.

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Custom Color Roofing Products

Custom color roofing products are a special case. For these products, it is not possible to collect samples from contractors or distributors, because 100% of the product is used for the custom job and none is warehoused. For custom colors, the Licensed Seller or Licensed OM is required to retain samples of the custom color for a period of three years. If the product is selected for random testing, the Licensed Sellers will provide the sample to CRRC for testing at an accredited independent testing laboratory.

Sample Collection Kit

After a distributor/contractor who can provide a sample has been identified through preliminary phone calls and the general process explained to them, a sample collection kit will be sent to the distributor/contractor.

Samples will be collected through the mail or other couriers. CRRC staff will not visit distributors or contractors. When a product is selected for testing, the CRRC will send a sample collection kit to the distributor or contractor to return to the CRRC. The CRRC will forward groups of samples to an AITL for testing. When a QA Organization is chosen to collect the sample the CRRC will send them a modified sample collection kit consisting of product identifying information, labels, sample blanks for fluid, and field-applied coatings. For field-applied coatings, the kit will include one or more aluminum “blanks” upon which the distributor or contractor will apply the requested coating(s), following sample preparation instructions from the Licensed Seller. The kit will also include appropriate packaging for sending the sample(s) in a manner that does not cause damage.

The sample request package for contractors and/or distributors consists of the following:

1. *Cover Letter.* One page cover letter from the CRRC identifying the product for which the sample is requested. The cover letter will list the other materials included in the package along with instructions on how to complete the documents or carry out the collection and/or sample preparation procedures.
2. *Licensed Seller’s Letter.* A copy of the generic letter from the Licensed Seller requesting help in sample collection.
3. *Sample Blanks.* For fluid, field-applied coatings, three aluminum panel sample blanks will be provided in the package (with instructions to send on only one sample).
4. *Licensed Seller’s Sampling Instructions.* A copy of the instructions from the Licensed Seller on how to prepare or choose the sample will be provided. This document is also provided to CRRC with the application for product rating.



5. *Labels.* Pre-printed labels will be provided for marking the samples. Each label will have information to link the sample to the CRRC product ID and to the cooperating distributor or contractor. The label will also have a date field for the completion by the cooperating distributor or contractor.
6. *Shipping Packaging.* The kit will include an envelope or box with pre-paid postage to be sent to the CRRC-. The kit will also include protective packaging to ensure that the sample is not damaged in transit.

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Testing Collected Samples

Samples will be sent from the cooperating distributor/contractor or the QA Organization to the CRRC. The CRRC will forward the groups of samples to AITL. The AITL will follow a CRRC-defined protocol when accepting a sample, based on appearance and uniformity of color, proper labeling, proper packaging, etc. The AITL is requested to hold the sample for one month following completion of testing.

Testing duties will be distributed as evenly as possible among the existing AITLs, paying heed to AITL testing capabilities depending on product type.

Evaluating Test Results

The results of the test would be compared to the data reported on the label and listed in the CRRC directory. If the randomly tested results are no more than 0.05 below the Rated results, then the product is deemed to have passed the random test, and a note will be placed in the file for the Rated product documenting the events. For example, if the Rated value is 0.50, then any test result that is 0.45 or higher is satisfactory and is deemed to pass the random test.

Remedy for Failure of Random Testing

If a Rated roofing product fails random testing, CRRC will take the following course of action:

1. The AITL that performed the random test will be contacted to confirm that there are no typographical or other errors in the reported results.
2. If there are no errors then the sample is tested at another AITL (sent within a month of original testing).
3. If the discrepancy still exists, then the Licensed Seller will be contacted and advised of the problem.
4. Another sample will be collected from another participating contractor/distributor and the second sample will be tested at an AITL at the expense of the Licensed Seller.
5. If the second sample passes the test, then a note will be placed in the file for the Rated product documenting the events and the product will be deemed to pass the random test.
6. If the second sample fails the test, then the CRRC Board will take appropriate corrective action.

Coordination with Round Robin Testing of Laboratories

Since product samples have already been obtained through the process of random testing, a sample tested by one AITL will be selected to be tested by the other AITLs as well. Comparison of these results will constitute the round robin testing of the laboratories.