



Early Color Family Product Submittal Option: Explanation and Instructions for Participation

**Prepared on
8/26/05**

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Questions about this document and the processes it covers should be directed to Sarah Van Mantgem, CRRC Program Manager, at (866) 465-2523 (toll free in U.S.) or (520) 731-2111 or info@coolroofs.org

Background

Overview

This document provides an overview of and instructions for participating in a limited, early submittal period for metal roofing products (both coatings and end products), which are intended to be rated as “Color Family Products” under the proposed Cool Roof Rating Council (CRRC) Color Family Product program protocol. The CRRC Board established and announced the limited opportunity described herein on August 25, 2005, to address manufacturer concerns about the timing of the final adoption of the new CRRC Color Family Product program protocol relative to the timing of California Title 24 building energy codes taking effect in October 2005 and subsequent codes expected to be implemented in October 2008. If the reader is familiar with the background and reasons behind this early submittal opportunity, he/she should proceed to section “Eligible Manufacturers and Products” (see page 4) and read to the bottom from there for requirements and instructions on how to participate. Otherwise, please read the section immediately below to determine whether this offer is of interest.

Please notify the CRRC (letter, fax or email) of your intent to take advantage of this early opportunity so that we may allocate the necessary staffing resources. Include an estimate of the number of products you intend to submit during the Option period. Failure to notify CRRC in writing of your intent may result in disqualification of submittal. This opportunity is being offered as a courtesy in response to expressed industry concerns – notification is therefore appreciated.

CRRC Color Family Program Background

For approximately two years, the CRRC has been working actively with manufacturers and related interest groups to develop a new product rating protocol specifically for metal roof products that have factory applied coatings that fully determine the radiative properties of such metal roofing products. The CRRC Board of Directors has recognized that the manufacturers of metal products have demonstrated a need to modify the Product Rating Program manual (CRRC-1), such that a new protocol be developed that allows products of similar shades of color to be rated as a single “product” within the CRRC system. Eighteen CRRC-recognized color “spaces” or ranges were adopted through a public process, each with a designated default reflectance and emittance value. Under the proposed new protocol, a manufacturer of Factory Coated Roofing Components or products can then establish “Color Family Products” for each CRRC-recognized color range per binder/resin technology category. Once established, a manufacturer could then submit additional, individual color products (referred to as “Elements” in this document) for inclusion under the Color Family Product. This will only apply as long as such Elements’ Hunter L, a, b readings fall within the ranges for which the manufacturer’s Color Family Product was defined (one of the 18 CRRC-defined color spaces) and as

long as such Elements' radiative properties meet or exceed the minimum default values defined by CRRC for that respective color space.

For example, this program would allow a manufacturer to bundle 2 or more shades of light blue together as a single "product" for purposes of CRRC initial and aged ratings as well as CRRC labeling. Thus, within a single binder/resin technology, a metals product manufacturer (a Licensed Seller) or the respective coatings manufacturer (a Licensed Other Manufacturer) would have no more than 18 products to run through the standard CRRC product rating process (initial testing, weathering, aged testing, and random testing). We would like to draw your attention to the fact that the CRRC Board has adopted the color family program in principle, but it should be noted that the CRRC has not established the program infrastructure at this time.

Justification for Early Color Family Product Submittal Option

In discussions in the CRRC Board meeting on August 25, 2005, the Board agreed that it expects to finalize and adopt the new CRRC Color Family Product program protocol by late September 2005. While this full adoption is imminent, the Board has responded to strong desires of some manufacturers of metal, factory-coated products to allow early submittal (i.e. ahead of final program adoption) of Color Family Product applications. This is a result of permitting products to be processed in time for the Fall equinox test farm placement (September 21, 2005) or at least by October 1, 2005, the effective date of California's new Title 24 building standards. Some metal factory-coated product and coatings manufacturers may be anxious to have some or all of their Color Family Products rated and placed out for weathering on this Fall equinox because they believe that having the CRRC published aged test results by October 2008 will give them advantage over expected Title 24 default aged test results that would be applied for products for which only CRRC initial test results are available beginning in October 1, 2008, the presumed date for the implementation of the next round of Title 24 standards.

It is widely anticipated that this future round of Title 24 standards will use cool roofs as the basis for code compliance for residential buildings as does the October 2005 implementation of Title 24 standards for low slope commercial buildings. Products not placed out by the test farm until December of 2005, will not enjoy published CRRC aged test ratings until some time in January 2009, potentially missing the first three to four months of implementation of the 2008 update to Title 24.

Additionally, some metal factory-coated product and coatings manufacturers may be anxious to have some or all of their Color Family Products rated well before October 1, 2005 due to a possible increase in market demand for CRRC-rated metal roofing products. This belief is prompted by the October implementation of the new Title 24, which primarily affects roof products for commercial low slope roofs, and to a lesser extent, steep slope commercial and residential roofs. The CRRC does not confirm or deny the merits of these manufacturer perspectives, nor does CRRC specifically encourage participation in this Early Color Family Product Submittal Option. Rather

CRRC makes it available to those eligible Licensed Sellers and Licensed Other Manufacturers that have requested and are interested and capable of responding in the time frame available.

Please note: additional Color Family Product Elements will not be accepted until further notice from CRRC.

Eligible Manufacturers and Products

In order to participate in this Early Color Family Product Submittal Option, a manufacturer and its product being submitted must meet the following requirements.

- 1 Manufacturer is already either a Licensed Seller or Other Manufacturer in good standing with the CRRC¹,
- 2 Manufacturer makes the coatings that are factory applied to metal roofing products and/or manufacturer brings to market factory-coated products that are metal roofing products,
- 3 Manufacturer must intend that products being submitted through this Option will become Elements of the Color Family Products following CRRC Board adoption of the Color Family Product program protocol,
- 4 Manufacturer has confirmed through its own AMTL or AITL tests results using CRRC-approved test procedures or through reliance on CRRC approved ratings by Licensed Other Manufacturer that the products it submits in fact fall within the CRRC-defined color space to which manufacturer assigns it and exceeds the CRRC-established default values for that color space,
- 5 Products must be either metal roofing products that are factory-coated products or coatings that solely determine the radiative properties of metal products that are factory-coated products, and
- 6 During this Option period, Manufacturer should submit only one unique color product per Color Family Product and that product, known as the “representative product”, should have the lowest reflectance and emittance value for all colors the manufacturer reasonably anticipates adding under this particular Color Family Product.

Requirements for Participation in the Early Color Family Product Submittal Option

In order to participate in this Option, the Licensed Seller or Licensed Other Manufacturer must:

¹ Due to the October 1, 2005 Title 24 deadline and time required for processing new license applications the CRRC is not able to offer this opportunity to those who are not already CRRC licensed.

- 1 Be an eligible licensee with an eligible product both as defined in the section immediately above,
- 2 Submit the product rating application(s) and all necessary supporting materials such that they are delivered to CRRC or post marked on or before five (5 business days) following the adoption by the CRRC Board of the new Color Family Product Submittal (*please note that it is anticipated that the Board will vote to implement a formal infrastructure in September 2005; as such 5 days following that formal approval this early submittal option will cease to exist*),
- 3 Make payment to CRRC in the amount of \$265 dollars per intended Color Family Product², and
- 4 Agree that product ratings obtained under this Option will be officially converted to Color Family Product Representative Element shortly after the Color Family Product Program is adopted by the Board.

Early Color Family Product Submittal Option Schedule

8/25/05	Adoption of Color Family Product Fees
8/26/05	Opening of Early Color Family Product Submittal Option Period
TBD ³	Last date to send samples to AITL to meet Fall equinox
~9/12/05 ⁴	Last date for samples to arrive at Test Farm to meet Fall equinox
9/21/05	Test farm placement date: Fall equinox
~9/22/05 ⁵	Last day to deliver Early Option submittals to CRRC

Part II. Instructions for Early Color Family Product Submittal Option Schedule

Generally, products submitted under this Option shall be treated according to the currently approved product rating procedures described in CRRC-1 and using standard CRRC application and test forms (e.g. CRRC-F-2 and CRRC-F-3). A checklist that summarizes the process for individual product ratings submittal is attached for your

² Please note that the Board approved new product rating fees on August 25, 2005, effective September 1, 2005. This new rate structure includes newly established product rating fees for Color Family Products. The initial rating fee for Color Family Products is \$215. In order to accommodate the Early Color Family Product Submittal Option, however, manufacturers will first submit products as if they were individual products using existing CRRC product application forms and processes and shortly after the Board adopts the Color Family Program a second set of applications and processing (once those new CRRC forms are ready) will be required to convert such early option applications into proper Color Family Products. This two step process requires that CRRC apply a \$50 “conversion fee”. Thus, the total initial application fee under this Option is \$265.

³ Licensees must contact AITLs to determine when the latest date is that AITLs will accept submittals and still commit to getting them to Test Farm in time for placement on the Fall equinox.

⁴ Please note this date is approximate. It is also substantially later than suggested in Ted Pope’s email announcement dated 8/25/05 which reported that the last date to deliver samples to the Test Farm was approximately 9/1/05. The Test Farm has agreed to relax the usual delivery deadline (first of the month before the solstice/equinox) to accommodate participants during this unique Option period.

⁵ The actual date is five business days after CRRC announces the adoption of the Color Family Product program, expected to be in mid to late September 2005

convenience and is also available at www.coolroofs.org. Again, we are using standard forms and processes because CRRC has not completed development of new, special forms for Color Family Products or Color Family Product Elements.

Steps Unique to Early Color Family Product Submittals:

In addition to using the standard forms and applications and following the standard product application process for individual products (see Appendix A, which is taken from the website www.coolroofs.org), in order to participate in the early submittal option, Licensees must provide a few more pieces of information to assist CRRC in processing the applications. These steps are outlined below:

1. By letter, fax or email, please notify Sarah Van Mantgem that you intend to submit under this Option. Please include an estimate of the number of products you intend to submit during the Option period. Failure to notify CRRC in writing of your intent may result in disqualification of submittal.
2. Include a signed cover letter with the usual product rating application materials that:
 - a. asserts that the products represented in that application package are being submitted under the Early Color Family Product Submittal Option process, and
 - b. reports for each product:
 - i. the CRRC-defined color space (see attached chart), expressed in terms of Hunter L,a, b values, in which that product falls,
 - ii. the applicable CRRC-defined default reflectance and emittance values, and
 - iii. The description of the binder/resin technology of the product
3. Include a check in the amount of \$265 per product instead of the standard, individual product fee. Please note this fee is comprised of both the newly established Color Family Product initial rating fee of \$215 and a \$50 “conversion fee”. Please also note that we are close to the end of Calendar year 2005 and that product fee renewals (\$120 per Color Family Product) will be due on the first of the year. The complete, new CRRC Fees and Dues table, adopted August 25, 2005 and effective September 1, 2005, is available on our website at www.coolroofs.org.

If you have any questions about this Option, please contact Sarah Van Mantgem, CRRC Program Manager at (866) 465-2523 (toll free in U.S.) or (520) 731-2111 or info@coolroofs.org.

Appendix A: Standard Product Rating Checklist



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How Do I Get a Product Rating?

Fee & Documentation Application Requirements

In order to have products rated by the CRRC, a company must first become a CRRC Licensed Seller or Other Manufacturer, which is separate and distinct from CRRC membership (see Licensed Sellers and Other Manufacturers Requirements). Once a company has been approved as a Licensed Seller or Other Manufacturer and given an ID number, it is then eligible to apply for product ratings.

The following is a list of steps for each application for a product rating. All forms and agreements are available for download from the Product Rating Program section of the CRRC website, www.coolroofs.org. For more complete details about the CRRC Product Rating Program, please refer to the CRRC-1 Product Rating Program Manual.

Initial Product Rating Procedure:

1. Select Accredited Independent Testing Laboratory (AITL) from CRRC website, http://www.coolroofs.org/productratingprogram_laboratories.html.
2. Select Test Farm from CRRC website.
3. Prepare product samples. For each product being tested, prepare a total of nine (9) samples randomly selected from two batches of your products, distributed as follows into the following groups:
 - a. Three samples from one batch
 - b. Three samples from second batch
 - c. Three samples, for which both batches must be representedLabel each sample such that it can be uniquely identified (throughout a four-year period) by batch and sample within each batch. See Section 3.5 of CRRC-1 for further instructions on sample selection.
4. Complete the top section of the Test Results Report (form CRRC-F-2) and check 'Initial Rating Test.'

5. Complete the top section of the Test Farm Notification Form (form CRRC-F-7).
6. Send package to selected AITL:
 - a. Test Results Report (top section completed)
 - b. Test Farm Notification Form (top section completed)
 - c. Product samples (9)
 - d. Selected Test Farm contact information (for use by AITL to forward samples after testing to Test Farm for weathering exposure).
7. Once initial rating testing is completed by AITL, receive completed Test Results Report, Initial Rating (form CRRC-F-2) from AITL.
8. Once AITL has shipped samples and Test Results Report to Test Farm and weathering exposure has been initiated, receive copy of Test Farm Notification Form (form CRRC-F-6) from Test Farm, which must show sample exposure placement and aged testing start date information.
9. Once the forms in 7 and 8 have been received submit complete Initial Product Rating Application packet to CRRC (Note: the Test Farm Notification form may be submitted *after* the Initial Product Rating Application packet is filed with the CRRC, but must be received by the CRRC within 30 days of the exposure date):
 - a. Product Rating Application (form CRRC-F-3)—signature required. In area 11, Type of Application, check “New Product.”
 - b. Corresponding Test Results Report (form CRRC-F-2) for Initial Rating. [Or alternatively, if you are a Licensed Seller utilizing an Other Manufacturer’s test results, submit the OM Rating Authorization (form CRRC-F-6).]
 - c. Corresponding Test Farm Notification Form (form CRRC-F-7) (must have sample exposure placement and aged testing start date information).
 - d. Name and contact information of the quality control manager(s).
 - e. Appropriate Per Product Rating Application fee (see Fee and Dues Structure).

Additional Requirements for Licensed Sellers only:

 - f. List of no less than three contractors or distributors from which product samples can be obtained (custom color excluded) (no form provided).
 - g. One page instruction sheet (separate from all other documents) on how to collect or prepare a sample for testing purposes that will be given to contractors or distributors in the event of collection for random testing.
10. Upon acceptance and approval of Product Rating Application materials by CRRC, the product will be added to the online CRRC Rated Products Directory (which is updated twice monthly) with initial ratings listed and aged 3-year ratings noted as “pending.” Upon posting to the online CRRC Rated Products Directory, Licensed Seller or OM is authorized to print CRRC product Labels with initial rating information.

Note: CRRC processing of Product Rating Application may take up to 30 days.

Aged Product Rating Procedure (after three years):

11. Upon completion of three-year exposure at Test Farm, communicate with Test Farm as to which AITL (need not be the same AITL used for initial ratings) product samples should be sent.
12. Complete the top section of a second Test Results Report (form CRRC-F-2) and check 'Aged Rating Test.' Send to selected AITL.
13. Once aged rating testing is completed by AITL, receive from AITL:
 - a. Completed Test Results Report, Aged Rating (form CRRC-F-2), and
 - b. Completed Test Farm Notification Form (form CRRC-F-7), which must show aged testing stop date and removal information. [Note: this form is forwarded from Test Farm to AITL along with weathered product samples.]
14. Once forms in 13 are received, submit complete Aged Product Rating Application packet to CRRC:
 - a. Product Rating Application (form CRRC-F-3)—signature required. In box 11, Type of Application, check "Aged Ratings" and include CRRC product ID in box 13.
 - b. Corresponding Test Results Report (form CRRC-F-2) for Initial Rating. [Or alternatively, if you are a Licensed Seller utilizing an Other Manufacturer's test results, submit the OM Rating Authorization (form CRRC-F-6).]
 - c. Corresponding Test Farm Notification Form (form CRRC-F-7), with aged testing stop date and removal information.
15. Upon acceptance and approval of aged ratings by CRRC, the product's listing in the online CRRC Rated Products Directory (which is updated twice monthly) will be updated with the 3-year data. Upon posting to the online CRRC Rated Products Directory, Licensed Seller or OM is authorized to print CRRC product Labels with aged rating information.

Appendix B: Designated Color Families

CRRC Color Families

Revised 07/11/05

	Color Family	Hunter L range	Hunter a range	Hunter b range	Default TSR	Default TE
1	Red	17 to 29	+7 to +36	0 to +15	0.25	0.83
2	Terra Cotta	20 to 38	+15 to +30	+6 to +16	0.35	0.83
3	Bright Red	23 to 38	+35 to +49	+10 to +48	0.35	0.83
4	Beige / Off-White	59 to 86	-5 to +5	-3 to +23	0.55	0.83
5	Tan	51 to 65	-2 to +7	+6 to +21	0.55	0.83
6	Dark Blue	13 to 33	-7 to +6	-21 to -2	0.25	0.83
7	Med to Light Blue	34 to 55	-12 to -3	-20 to -8	0.32	0.83
8	Dark Brown	17 to 30	-1 to +9	0 to +10	0.25	0.83
9	Med to Light Brown	25 to 58	-2 to 17	+5 to +26	0.32	0.83
10	Dark Green	18 to 45	-15 to -3	-5 to +11	0.25	0.83
11	Med to Light Green	24 to 70	-15 to 0	-5 to +11	0.32	0.83
12	White	76 to 89	-3 to +2	-3 to +10	0.65	0.83
13	Bright White	>85	-3 to +1	-3 to +6	0.70	0.83
14	Black	<26	-1.5 to +1.5	-1.5 to +1.5	0.25	0.83
15	Dark Gray	24 to 42	-4 to +2	-8 to +4	0.25	0.83
16	Med to Light Gray	40 to 77	-4 to +3	-3 to +8	0.35	0.83
17	Pearlescent Silver	50 to 75	-5 to +3	-3 to +8	0.45	0.75
18	Pearlescent Copper	38 to 60	2 to 17	5 to 24	0.40	0.75