# Cool Roofs



## What You Need to Know About LADWP Rebates and Building Code Requirements

#### What Is a Cool Roof?

A cool roof is a roofing product that reflects sunlight and absorbs less heat than traditional roofs. Cool roofs lower roof temperatures on hot sunny days and therefore keep homes cooler inside, saving energy by reducing the need for running air conditioning systems.

Although often light in color, cool roofs come in a wide variety of colors ranging from white to black and including blues, grays, greens, oranges, browns, and tans.

Cool roofs also are available in a variety of styles: shingle, shake, tile, membrane, and spray-on liquid coatings.

#### "Coolness" Factors

The "coolness" of a roof is determined by several properties of roofing materials and their combined effects on temperature. The primary factor is the material's ability to reflect the sun's energy back into the atmosphere ("solar reflectance"). A higher "solar reflectance" factor means the roof will stay cooler. Also the "solar reflectance" is measured by how long it retains its effectiveness ("aged solar reflectance"). If the product is new and the "aged solar reflectance" value is unavailable, it can be calculated using the following formula:

#### Formula:

3-year Aged Solar Reflectance = ( 0.2 + 0.7 x [ $\rho_{initial}$  – 0.2] ) (where  $\rho_{initial}$  = Initial Solar Reflectance)

In addition to "solar reflectance" a secondary factor used is known as "thermal emittance," which measures the material's ability to release heat. The Solar Reflectance Index (SRI) combines these two factors into a simple to use index value.

## **Building Code Requirements**

Starting Oct.1, 2014\*, the 2014 Los Angeles Green Building Code requires that roofing material used in residential buildings meet certain values for the "aged solar reflectance" and "thermal emittance", or for "SRI".

|                    | Min. 3-yr Aged<br>Solar Reflectance | Min. Thermal<br>Emittance | SRI |
|--------------------|-------------------------------------|---------------------------|-----|
| Low-slope ≤ 2:12   | 0.63                                | 0.75                      | 75  |
| Steep-slope > 2:12 | 0.20                                | 0.75                      | 16  |

## **Exceptions... Cool roof is NOT required for:**

- Roof repair; or
- Roof replacement when the roof area being replaced is equal to or less than 50% of the total roof area; or
- Where building-integrated photovoltaics (BIPV) are installed

#### **LADWP Rebates**

LADWP's cool roof rebates are available to single-family and multi-family residential customers, and are part of the Consumer Rebate Program.

#### **Rebate Levels**

- The base rebate for qualifying roofs is \$0.20 per square foot
- The enhanced rebate is \$0.30 per square foot

Roofing products must be tested and labeled by the Cool Roof Rating Council. A listing of rated products using the CRRC Rated Products Directory can be found at www.coolroofs.org/products/search.php

## **Qualifying Cool Roofs**

To qualify as a cool roof under the LADWP Consumer Rebate Program, the roofing material must:

- Have CRRC 3-year SRI value ≥ 75 for low-slope (≤2:12) or ≥ 16 for steep-slope (>2:12) roofs
- For the enhanced rebate, have CRRC 3-year SRI value ≥ 85 for low-slope (≤2:12) or ≥ 35 for steep-slope (>2:12) roofs

## **How to Apply**

LADWP advises customers to confirm rebate eligibility before making your purchase. Complete the Consumer Rebate Program application (available online at www.ladwp.com/rebatesandprograms) after purchasing and installing the product. All applications must be postmarked within 12 months of the purchase date. For your convenience, you may submit your application online or by mail.

Funds are available on a first-come, first-served basis. LADWP reserves the right to inspect and verify the installation of your products prior to releasing your rebate check. Rebates will be processed within six months of application submittal.

#### **Documentation**

Please include the following documentation with your application:

- Original Proof of Purchase or Original Home Improvement Contract Invoice (with manufacturer, product make and model number)
- A copy of your LADWP bill (Page 1)
- A copy of the roofing permit

#### For More Information about LADWP Rebates:

**Visit:** www.ladwp.com/rebatesandprograms (click on "Building Products") or **Call:** 1 800 DIAL DWP

## For More Information about the 2014 Green Building Requirements:

Visit: www.ladbs.org or Call: LADBS at 3-1-1

**Please note:** Funding is limited and rebates are not guaranteed. This program shall at all times be subject to change or termination without notice. \* Effective Jan.1, 2015 if replacing an existing roof with asphalt roof shingles or asphalt composition roll roofing.

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