

Cool Roof Collection Owens Corning[®] Shingles Meet Title 24 Requirements



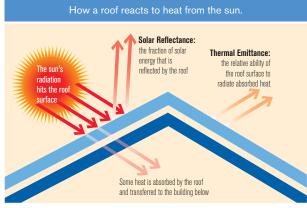


In addition to meeting Title 24 requirements, Owens Corning* Cool Roof Collection Shingles meet Property Assessed Clean Energy (PACE) Financing Programs requirements.

Owens Corning[®] COOL Roof Collection



In a premium offering of Owens Corning[®] Shingles, there are COOL Roof Collection colors that are specially designed to reflect the sun's rays, helping to make your home more comfortable and energy efficient. The COOL Roof Collection includes deep, rich colors which are unexpected for solar-reflecting shingles which are typically very light in color. Now you can save energy and look great at the same time.



Source: Cool Roof Rating Council (http://www.coolroofs.org)

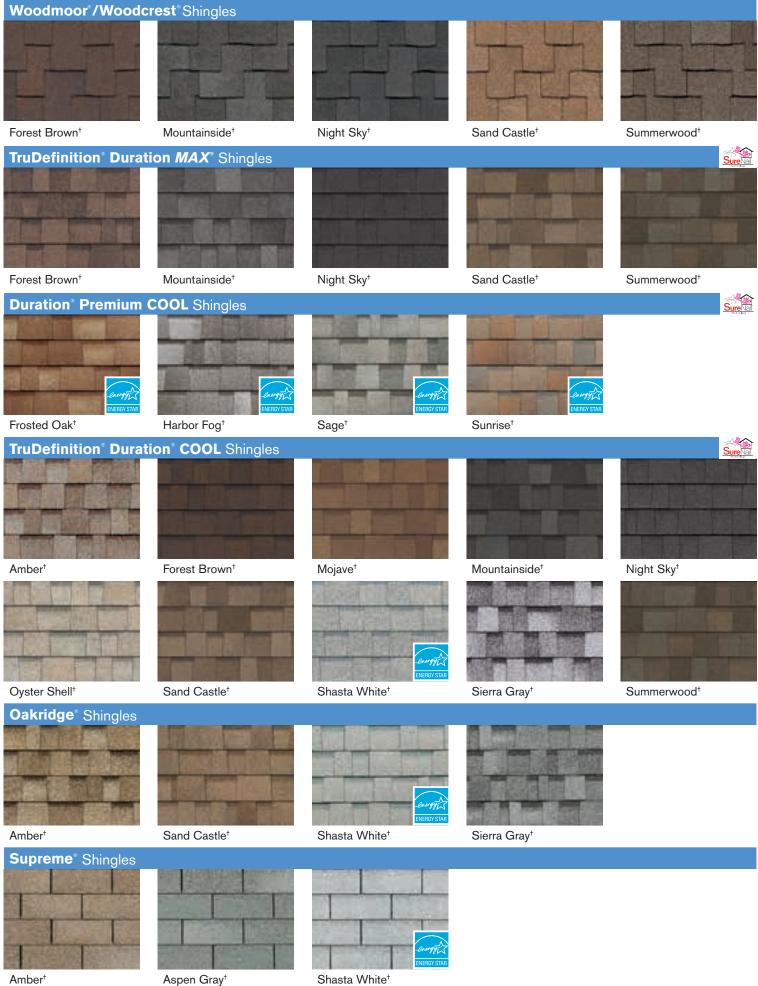
Cool Roof Requirements in California and Other Compliance Programs

Additional Features of COOL ROOF COLLECTION colors:

- Meet the prescriptive Cool Roof requirements of California Title 24, Part 6
- Are Cool Roof Rating Council (CRRC) rated
- Meet City of Los Angeles Cool Roof requirements
- Meet Property Assessed Clean Energy (PACE) financing program requirements
- May help lower household energy consumption by keeping the roof cooler; also may help decrease CO₂ emissions







Aspen Gray⁺

Shasta White⁺



Owens Corning [®] COOL Roof Shingles	Meets ENERGY STAR [®] Requirements	CRRC Product ID	Warranty Length	Solar Reflectance	Thermal Emittance	Solar Reflectance Index (SRI)							
Woodmoor* Forest Brown		0890-0024	Limited Lifetime*/*	0.17 ◊	0.9200	16††							
Woodmoor [®] Mountainside		0890-0027	Limited Lifetime*/#	0.190	0.9000	18††							
Woodmoor [®] Night Sky		0890-0028	Limited Lifetime*/#	0.190	0.9000	18††							
Woodmoor [®] Sand Castle		0890-0029	Limited Lifetime*/#	0.180	0.9000	16++							
Woodmoor [®] Summerwood		0890-0025	Limited Lifetime*/#	0.17 ◊	0.91 ◊◊	16††							
Woodcrest [®] Forest Brown		0890-0024	Limited Lifetime*/#	0.17 ◊	0.9200	16††							
Woodcrest [®] Mountainside		0890-0027	Limited Lifetime*/#	0.190	0.90 ◊◊	18††							
Woodcrest® Night Sky		0890-0028	Limited Lifetime*/#	0.190	0.90 ◊◊	18††							
Woodcrest [®] Sand Castle		0890-0029	Limited Lifetime*/#	0.18◊	0.90 ◊◊	16††							
Woodcrest [®] Summerwood		0890-0025	Limited Lifetime*/#	0.17 ◊	0.91 ◊◊	16++							
TruDefinition [*] Duration <i>MAX</i> [*] Forest Brown^^		0890-0018A	Limited Lifetime*/#	0.18◊	0.91 ◊◊	17††							
TruDefinition [®] Duration <i>MAX</i> [®] Mountainside^^		0890-0016A	Limited Lifetime*/#	0.190	0.9200	19††							
TruDefinition [®] Duration <i>MAX</i> [®] Night Sky^^		0890-0026	Limited Lifetime*/#	0.180	0.90 0	16††							
TruDefinition [®] Duration <i>MAX</i> [®] Sand Castle^^		0890-0020	Limited Lifetime*/#	0.17	0.92	16							
TruDefinition [®] Duration <i>MAX</i> [®] Summerwood^ ^		0890-0015A	Limited Lifetime*/#	0.180	0.91 ◊◊	18††							
Duration [®] Premium COOL Frosted Oak^^		0890-0005	Limited Lifetime*/#	0.28	0.91	30							
Duration [®] Premium COOL Harbor Fog^^		0890-0004	Limited Lifetime*/#	0.30	0.90	32							
Duration [®] Premium COOL Sage ^ ^		0890-0003	Limited Lifetime*/#	0.29	0.88	30							
Duration [®] Premium COOL Sunrise ^ ^		0890-0006	Limited Lifetime*/#	0.28	0.91	30							
TruDefinition [®] Duration [®] COOL Forest Brown [^]		0890-0018A	Limited Lifetime*/#	0.180	0.91 ◊◊	17††							
TruDefinition [®] Duration [®] COOL Mojave ^ ^		0890-0017A	Limited Lifetime*/#	0.190	0.9200	19††							
TruDefinition [®] Duration [®] COOL Mountainside ^ ^		0890-0016A	Limited Lifetime*/#	0.190	0.9200	19††							
TruDefinition [®] Duration [®] COOL Night Sky^^		0890-0026	Limited Lifetime*/#	0.180	0.90 0	16††							
TruDefinition [®] Duration [®] COOL Summerwood^ ^		0890-0015A	Limited Lifetime*/#	0.180	0.91 ◊◊	18††							
TruDefinition [®] Duration [®] COOL Amber ^ ^		0890-0009	Limited Lifetime*/#	0.23	0.92	24							
TruDefinition [®] Duration [®] COOL Oyster Shell^ ^		0890-0012	Limited Lifetime*/#	0.23	0.93	24							
TruDefinition [®] Duration [®] COOL Sand Castle^ ^		0890-0020	Limited Lifetime*/#	0.17	0.92	16							
TruDefinition [®] Duration [®] COOL Shasta White^^		0890-0008	Limited Lifetime*/#	0.29	0.87	29							
TruDefinition [®] Duration [®] COOL Sierra Gray^ ^	undiffini	0890-0013	Limited Lifetime*/*	0.20	0.92	20							
Oakridge [®] Amber		0890-0009	Limited Lifetime*/*	0.23	0.92	24							
Oakridge [®] Sand Castle		0890-0020	Limited Lifetime*/*	0.17	0.92	16							
Oakridge [®] Shasta White		0890-0002	Limited Lifetime*/*	0.28	0.91	30							
Oakridge* Sierra Gray	LODING AND	0890-0013	Limited Lifetime*/*	0.20	0.92	20							
Supreme® Amber		0890-0014	25 Years	0.22◊	0.9200	22 ⁺⁺							
Supreme® Aspen Gray		0890-0010	25 Years	0.20	0.92	20							
Supreme [*] Shasta White	anti	0890-0001	25 Years	0.29	0.92	31							

ENERGY STAR[®] IS FOR ROOFS TOO

Similar to the energy-efficient appliances in your home, roofing products can help provide energy-saving qualities. Owens Corning "ENERGY STAR" qualified shingles can help reduce your heating and cooling bills when installed properly. These shingles reflect solar energy, helping to decrease the amount of heat transferred to a home's interior — and the amount of air conditioning needed to keep it comfortable. Actual savings will vary based on geographic location and individual building characteristics. Call 1-800-GET-PINK" or 1-888-STAR-YES for more information.

There's a line between a good shingle and a great shingle[™].

It's the nailing line on your shingles. The difference between a good shingle and a great shingle is having Patented SureNail Technology. With SureNail strip, strength and durability are built into every Duration Series shingle. This unique shingle design provides outstanding gripping power.

Excellent Adhesive Power

Helps keep the shingle layers laminated.

Outstanding Grip ↔

The SureNail[®] strip enhances the already amazing grip of our proprietary Tru-Bond^{*##} sealant for exceptional wind resistance of a 130-MPH wind warranty.*



is embedded in the shingle to create an easy-to-see strong, durable fastener zone.





→ Triple Layer Protection*+

A unique "triple layer" of reinforcement occurs when the fabric overlays the two shingle layers, called the common bond area.

→ Double the Common Bond

SureNail[®] features up to a 200% wider common bond area in the nailing zone over standard shingles.

TOTAL PROTECTION SIMPLIFIED



Owens Corning[®] Total Protection Roofing System[®]^ integrates engineered

Owens Corning^{*} components that work together to address these three primary performance areas, critical to a high-performance roof, while also making it easy to understand the importance of each. With Owens Corning, it's easy to confidently deliver total protection, beauty and peace of mind.



HELPS CREATE A WATER-PROOF BARRIER Self-Adhered Ice & Water Barrier Synthetic Underlayment

> HELPS PROTECT AGAINST NATURE'S ELEMENTS Starter Shingles Laminate Shingles Hip & Ridge Shingles



FOR BALANCED ATTIC VENTILATION Intake Vents Exhaust Vents

Exhaust vehits -

+ COMFORT. Add comfort and energy performance with proper attic insulation.

LLLI

	Product Attributes				Product Specifications				Applicable Standards and Codes										
Owens Corning" Shingle Collection	Warranty Length*	Wind Resistance Limited Warranty*	Algae Resistance Limited Warranty*	TRU PROtection [®] Non-Prorated Limited Warranty* Period	Nominal Size	Exposure	Shingles per Square	Bundles per Square	Coverage per Square	ASTM D228	ASTM D3018 (Type 1)	ASTM D3161 (Class F Wind Resistance)	ASTM D3462	ASTM D7158 (Class H Wind Resistance)	ASTM E108/UL 790 (Class A Fire Resistance)	Florida Product Approval	ICC-ES AC438#	UL ER2453-01##	UL ER2453-02##
Duration [®] Premium COOL Shingles	Limited Lifetime ^{§/‡}	130 MPH	10 Years	10 Years	13¼" x 39¾"	5 ⁵ /8"	64	4	98.4 sq. ft.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
TruDefinition [®] Duration [®] COOL Shingles	Limited Lifetime ^{§/‡}	130 MPH	N/A	10 Years	13¼" x 39¾"	5%"	64	3	98.4 sq. ft.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark
Oakridge [®] Shingles	Limited Lifetime ^{s/‡}	110/130 MPH**	N/A	10 Years	13 ¹ /4" x 39 ³ /8"	5 ^{5/8} "	64	3	98.4 sq. ft.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Supreme [®] Shingles	25-Year Limited	60 MPH	N/A	5 Years	13 ¹ ⁄4" x 39 ³ ⁄8"	5 ^{5/8} "	65	3	99.98 sq. ft.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Woodmoor [®] Shingles	Limited Lifetime ^{§/‡}	110/130 MPH ^{§§}	10 Years	10 Years	14 ¹ /4" x 40"	4"	90	6	100 sq. ft.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark
Woodcrest [®] Shingles	Limited Lifetime ^{§/‡}	110/130 MPH ^{§§}	10 Years	10 Years	14¼" x 40"	4"	90	6	100 sq. ft.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark
TruDefinition [®] Duration MAX^{*} Shingles	Limited Lifetime ^{s/‡}	130 MPH	N/A	10 Years	13 ¹ / ₄ " x 39 ³ / ₈ "	5%"	64	4	98.4 sq. ft.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark

Shasta White color meets ENERGY STAR[®] requirements for initial solar reflectance of 0.25 and 3-year aged solar reflectance of 0.15; 2013 California Building Energy Efficiency Standards, Title 24, Part 6 requirements; rated by the Cool Roof Rating Council (CRRC).

 * See actual warranty for complete details, limitations and requirements.

** 110 MPH is standard with 4-nail application. 130 MPH is applicable only with 6-nail application and Owens Corning[®] Starter Shingle products application along eaves and rakes in accordance with installation instructions.

- † Owens Corning strives to accurately reproduce photographs of shingles. Due to manufacturing variances, the limitations of the printing process and the variations in natural lighting, actual shingle colors and granule blends may vary from the photo. The pitch of your roof can also impact how a shingle looks on your home. We suggest that you view a roofing display or several shingles to get a better idea of the actual color. To accurately judge your shingle and color choice, we recommend that you view it on an actual roof with a pitch similar to your own roof prior to making your final selection. Color availability subject to change without notice. Ask your professional roofing contractor for samples of colors available in your area.
- tt SRI calculation based on calculated aged solar reflectance and initial thermal emittance. SRI is calculated using California Energy Commission SRI calculator worksheet and it is calculated in accordance with ASTM E1980.
- § For as long as you own your home.
- Aged solar reflectance calculated based on equation provided in California Energy Code (Title 24, Part 6).
 Indicates initial thermal emittance.



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1-800-GET-PINK* www.owenscorning.com/roofing

Pub. No. 10019919-G. Printed in U.S.A. October 2018. THE PINK PANTHER[™] & © 1964–2018 Metro-Goldwyn-Mayer Studios Inc. All Rights Reserved. The color PINK is a registered trademark of Owens Corning. © 2018 Owens Corning. All Rights Reserved. (Compton) ^^ Features Patented SureNail® Technology.

- \$ 40-year Limited Warranty on commercial projects.
- # International Code Council Evaluation Services Acceptance Criteria for Alternative Asphalt Shingles.
- ## Underwriters Laboratories Evaluation Service Evaluation Report.
- §§ 130 MPH is applicable only with Owens Corning[®] Starter Shingle product application along eaves and rakes in accordance with installation instructions. ENERGY STAR[®] and the ENERGY STAR[®] mark are registered trademarks of the U.S. Environmental
- Protection Agency.
- ^ Excludes non-Owens Corning' roofing products such as flashing, fasteners, pipe boots and wood decking. ## Tru-Bond" is a proprietary premium weathering-grade asphalt sealant that is blended by Owens Corning. SureNail" Technology is proprietary with U.S. and foreign protection including U.S. Patent Nos. 6,471,812; 7,836,654; 8,156,704; 8,181,413; 8,240,102; 8,430,983; 8,607,521; 8,623,164; 8,752,351; 8,991,130;
- 9,121,178; and other patents pending. SureNail* Technology is not a guarantee of performance in all weather conditions.
- SureNail® Technology is available only on Owens Corning® Duration® Series Shingles.
- + The amount of Triple Layer Protection® may vary on shingle-to-shingle basis

