


ENERCON LIQUID SILICONE COOL ROOF COATINGS





Biggest challenge construction industry is facing is the lack of high performing and cost-effective ROOFING SOLUTION, which can serve as Cool Roofing and Waterproofing both at the same time.

EnerFlex SP 300 – Cool Roof Coating

COOL ROOF RATING COUNCIL NOTIFICATION OF PRODUCT RATING

Notification Provided By: Cool Roof Rating Council 2435 N. Lombard St. Portland, OR 97217	Notification Provided To: ENERCON Specialties LLC 1857 North Dale Blvd, Suite 164, Tampa, FL 33624
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Product Brand:	ENERCON	Product Type:	Coating
Product Model:	EnerFlex SP 300	Initial SRI:	110
Company:	ENERCON Specialties LLC	3 Year SRI:	89*
Contact Name:	Mohammad Ijaz	Slope Type:	Low, Steep
Telephone:	706-726-0788	Color:	Bright White



	Initial	Weathered
Solar Reflectance	0.87	0.72*
Thermal Emittance	0.90	0.90*
Rated Product ID	1446-0001 (smooth)	
Licensed Manufacturer	1446	
Classification	Standard Product	

Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary. Manufacturer of product attests that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.

The Cool Roof Rating Council (CRRC), an ISO 17065 accredited organization, has reviewed the test results data provided by a CRRC-approved ISO 17025 testing laboratory and has determined this roofing product meets the requirements described in the ANSI/CRRC S100 Standard and the CRRC-1 Program Manual. This Notification of Rating is subject to all terms and conditions of the License Agreement and the documents incorporated therein by reference. This document must be reproduced in its entirety.

The Notification of Rating certificate for the approved initial ratings is valid until an updated certificate is issued by the CRRC that includes the approved three-year aged ratings. The certificate with the approved three-year aged ratings is valid until either the CRRC or Licensee removes the product from the CRRC Rated Products Directory.

*CRRC Rapid Ratings: These are interim laboratory-aged values that simulate weathered values. These values will be replaced with the measured three-year aged values upon completion of the weathering process. SRI values calculated using Rapid Ratings may change once the aged rating replaces the interim rating.

Henry W. Hunter

Neil James Thompson

[Signature]

05/28/2024

Application/Technical Review Auditor Application/Technical Reviewer Management Approval Certificate Date

COOL ROOF RATING COUNCIL RAPID RATINGS	Rated Product ID #: 1446-0001 (smooth)		
		Smooth	Rough
		Initial / Aged	Initial / Aged
Solar Reflectance	0.87 / 0.72*	Not Rated	
Thermal Emittance	0.90 / 0.90*	Not Rated	

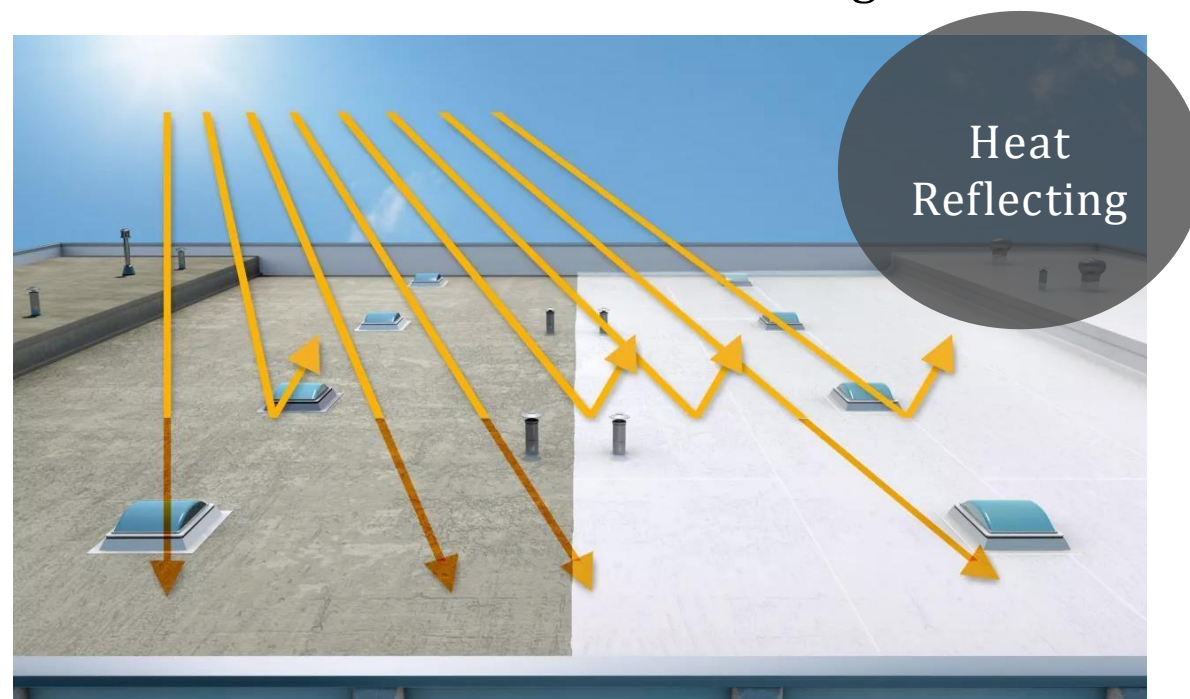
The ratings above are subject to CRRC rating program conditions, requirements and limitations. Visit coolroofs.org for important information and disclaimers about CRRC rating requirements and limitations. For the purposes of a CRRC rating, a rough substrate is defined as a surface that is equally coarse or coarser than a new (i.e., unweathered) #11 granulated modified bitumen sheet.

*CRRC Rapid Ratings: Interim laboratory-aged values that simulate naturally-aged values and will be replaced by the measured three-year naturally-aged values upon completion of the weathering process.



Advanced U.S. Technology which can perform all 3 functions of a roofing

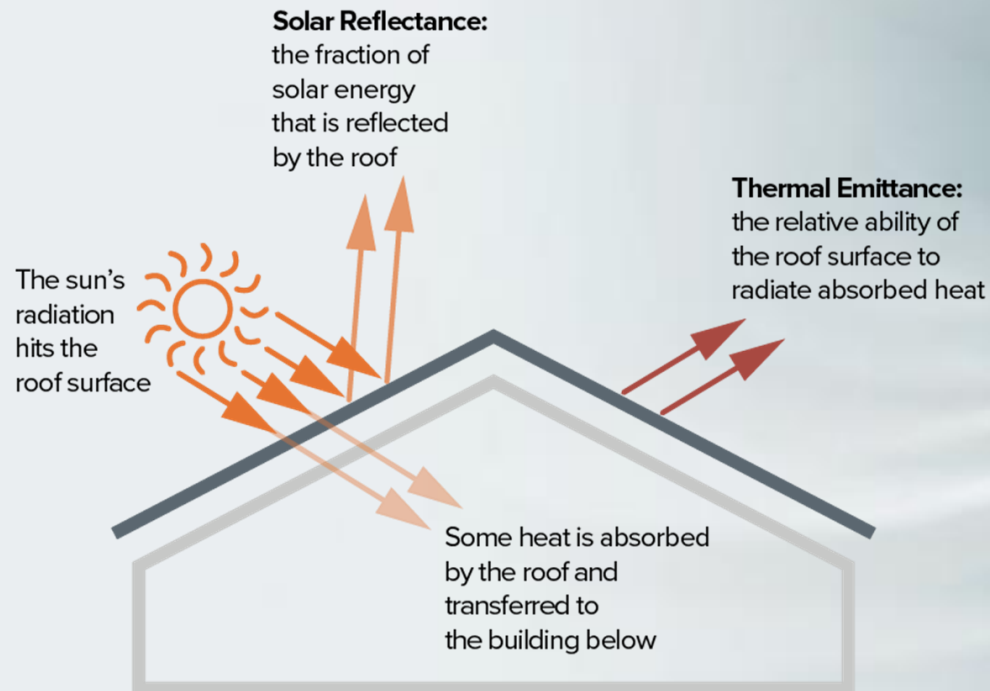
1. Cool Roofing by reflecting sunlight
2. Waterproofing even under ponding water situation
3. UV Resistance to extend the roofing life



4 Benefits Of Liquid Silicone

1. Cool Roofing

Liquid Silicone will reflect 90% of sunlight, thus isolating the roof substrate from external environment and creating a cool roof. It drops 25 °C roof external surface temperature



2. Reduced AC Bills

By reflecting 90% of sunlight, Liquid Silicone creates a cooler roof, which decreases inside room temperature, thus your AC costs go down by upto 15%.

4 Benefits Of Liquid Silicone

3. Advanced Waterproofing

Liquid Silicone is hydrophobic in nature, which repels water from the moment it is applied. Resistance to ponding water is an additional quality, which does not let water to seep in even if the water is standing on your roof.



4. UV Resistance

UV resistance is a key feature which determines the life of the roof. Liquid Silicone's excellent ability to reflect 90% of sunlight including UV rays, makes it last long.



Liquid Silicone Cool Roofing —Case Study

- Reduces external roof temperature by 23 °C
- Reduces internal roof temperature by 8 °C
- Reduces AC Energy Cost by 13%

Before
68 °C

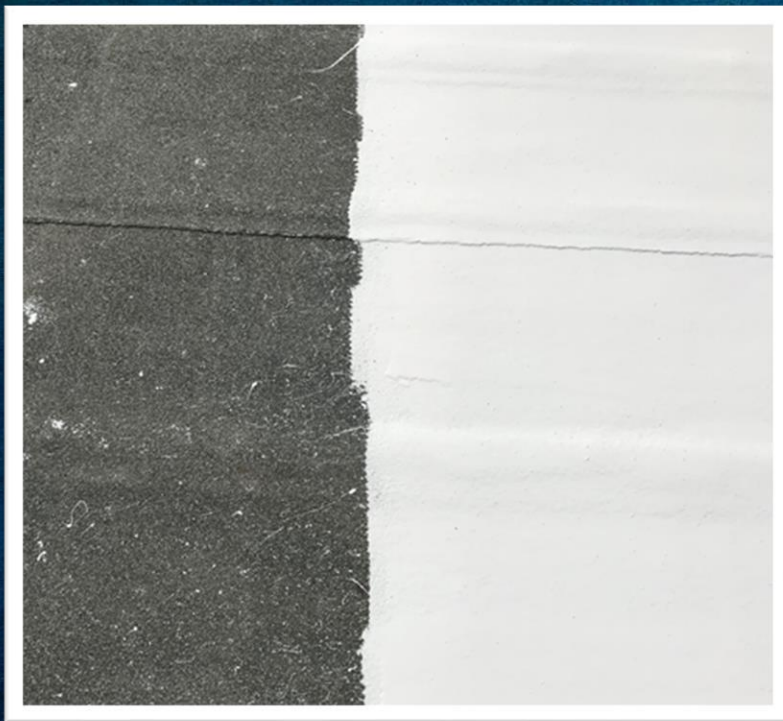


After
45 °C



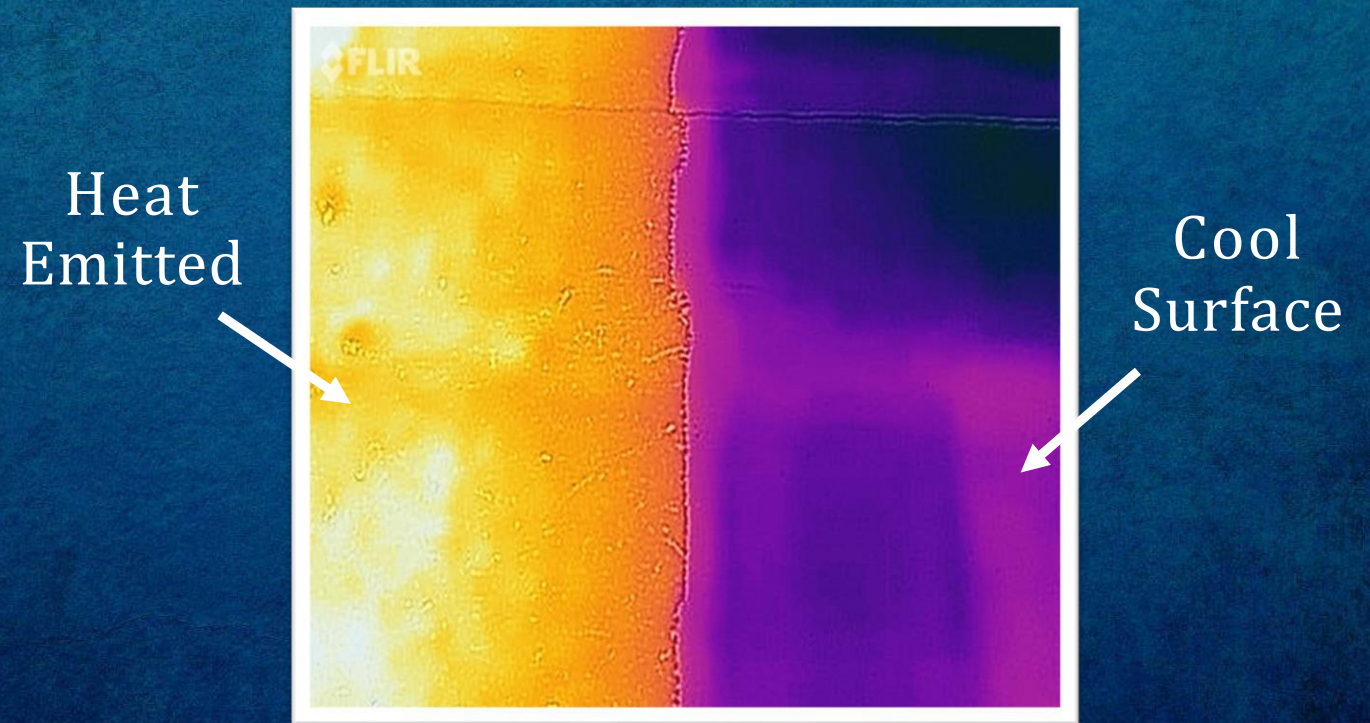
Liquid Silicone Cool Roofing —Performance

Normal Image



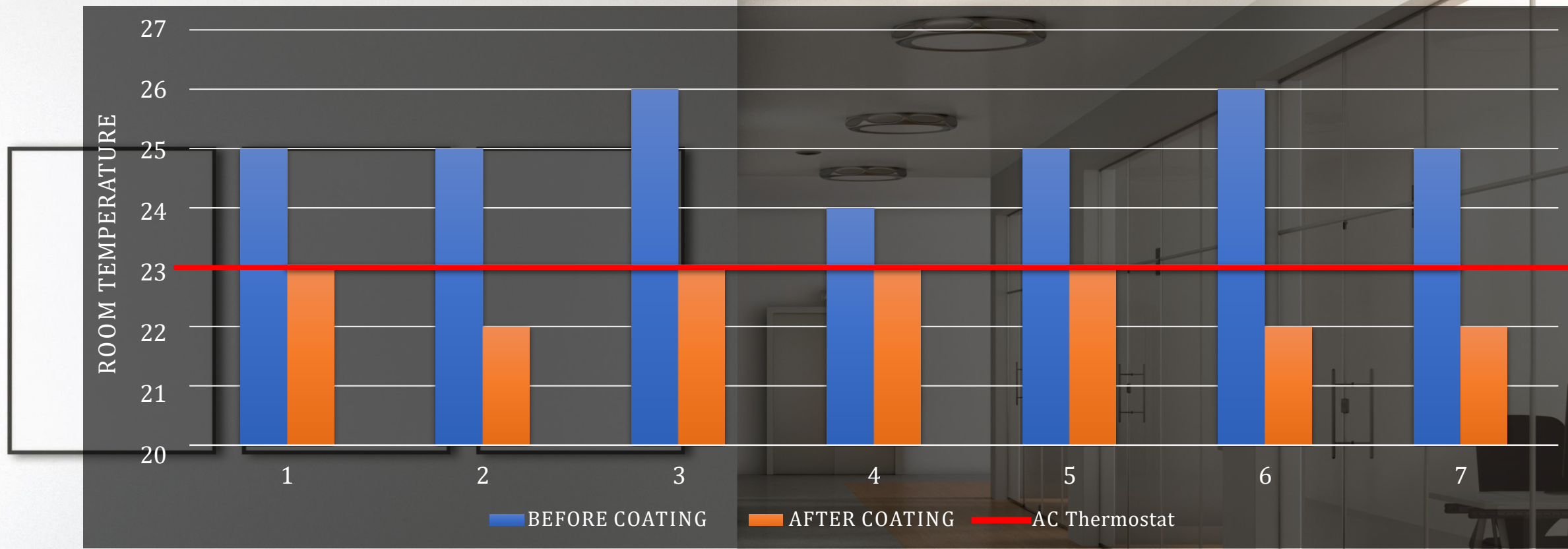
Bitumen | Silicone

Infrared Image



Bitumen | Silicone

Inside Temperature Drop using Liquid Silicon Roofing



Day	1	2	3	4	5	6	7
Before Coating (°C)	25	25	26	24	25	26	25
After Coating (°C)	23	22	23	23	23	22	22

Reduce Air Conditioning Energy Costs by 13%

KWh
consumption
before coating
23,072

KWh
consumption
after coating
20,339

Total one
week energy
savings
13%

Day	1	2	3	4	5	6	7
Before Coating (KWh)	3,334	3,390	3,317	3,316	3,254	3,273	3,188
After Coating (KWh)	2,978	2,962	2,932	2,861	2,903	2,856	2,847

EnerFlex SP 300 reflects 90% of incident sunlight thus making external roof surface cool and inside room cooler, which reduces Air Conditioning cost by upto 13%.

Water Proofing by Liquid Silicon Roofing

Prevents water leakages for 2 reasons:

1. Silicone is hydrophobic in nature & repels water
2. It forms a monolithic membrane - No Joints

Natural hydrophobic properties of liquid silicone makes it water repellent right from the beginning.

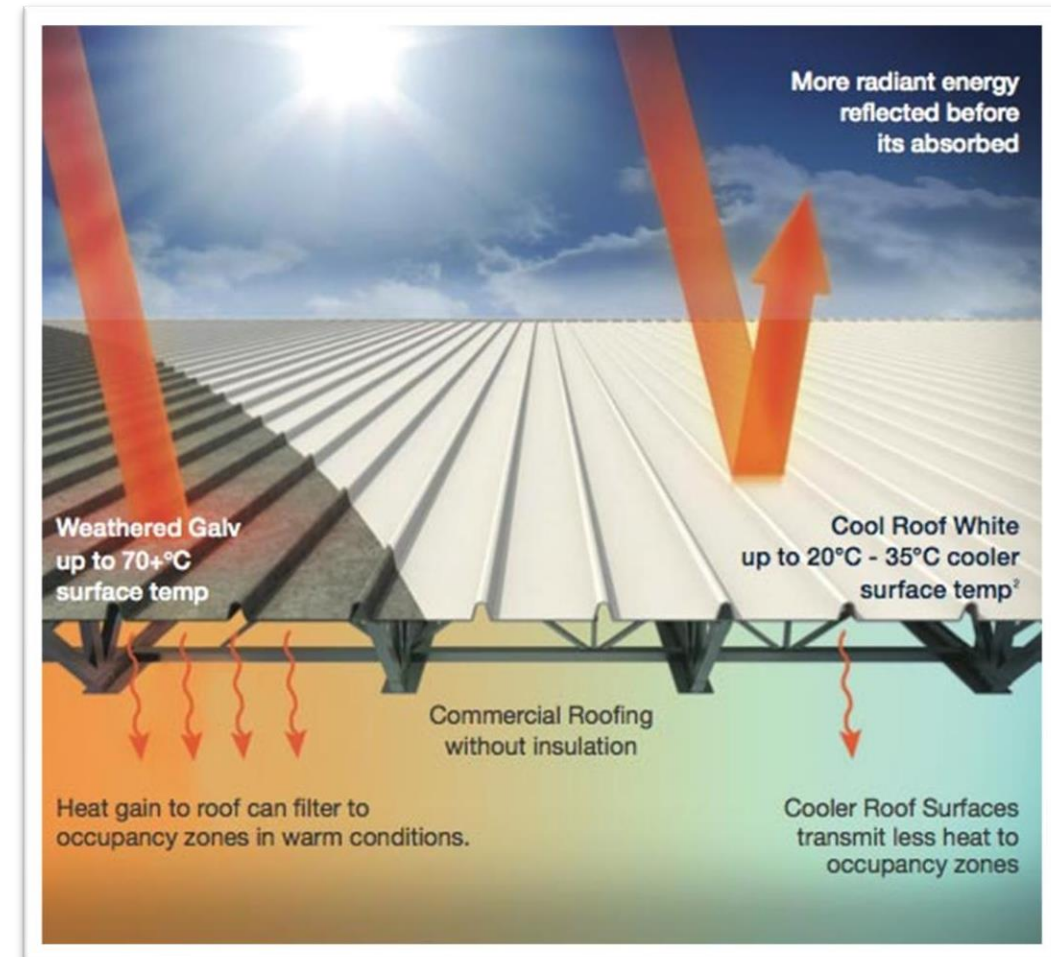
Once applied neither Silicone allows any water vapors to pass through the membrane nor it allows any standing water to seep through.



Single Component Complete Roofing Solution

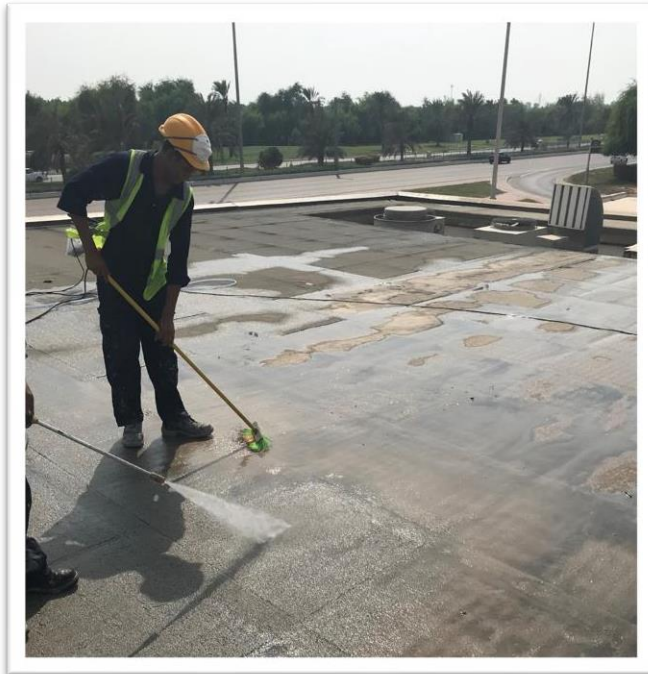
Liquid Silicone is a membrane, which bonds with the roof substrate by chemically reacting and forming a tight bond.

Once liquid silicone is applied, it protects the roof substrate by isolating it from external environment, be it sunlight, water exposure or UV rays.



How to Apply?

STEP 1



Clean the Surface

STEP 2



Apply Primer & EnerFlex SP 300

STEP 3



Cool Roof Coating Applied

Qualitative Analysis

ENERFLEX-SP 300

RESULTS

PHYSICAL FEATURES

Tensile Strength	220 psi
Elongation	250%
Hardness Shore A	40

COOL ROOFING

SRI (Solar Reflective Index)	110
Reflectivity & Emissivity	87 & 90

WATERPROOFING

Ponding Water Protection	Yes
Water Vapor Permeability	10.2 g/m ² /hr

CONTACT US

ENERCON SUPPLY PREMIUM & ADVANCED COOL ROOF COATINGS

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