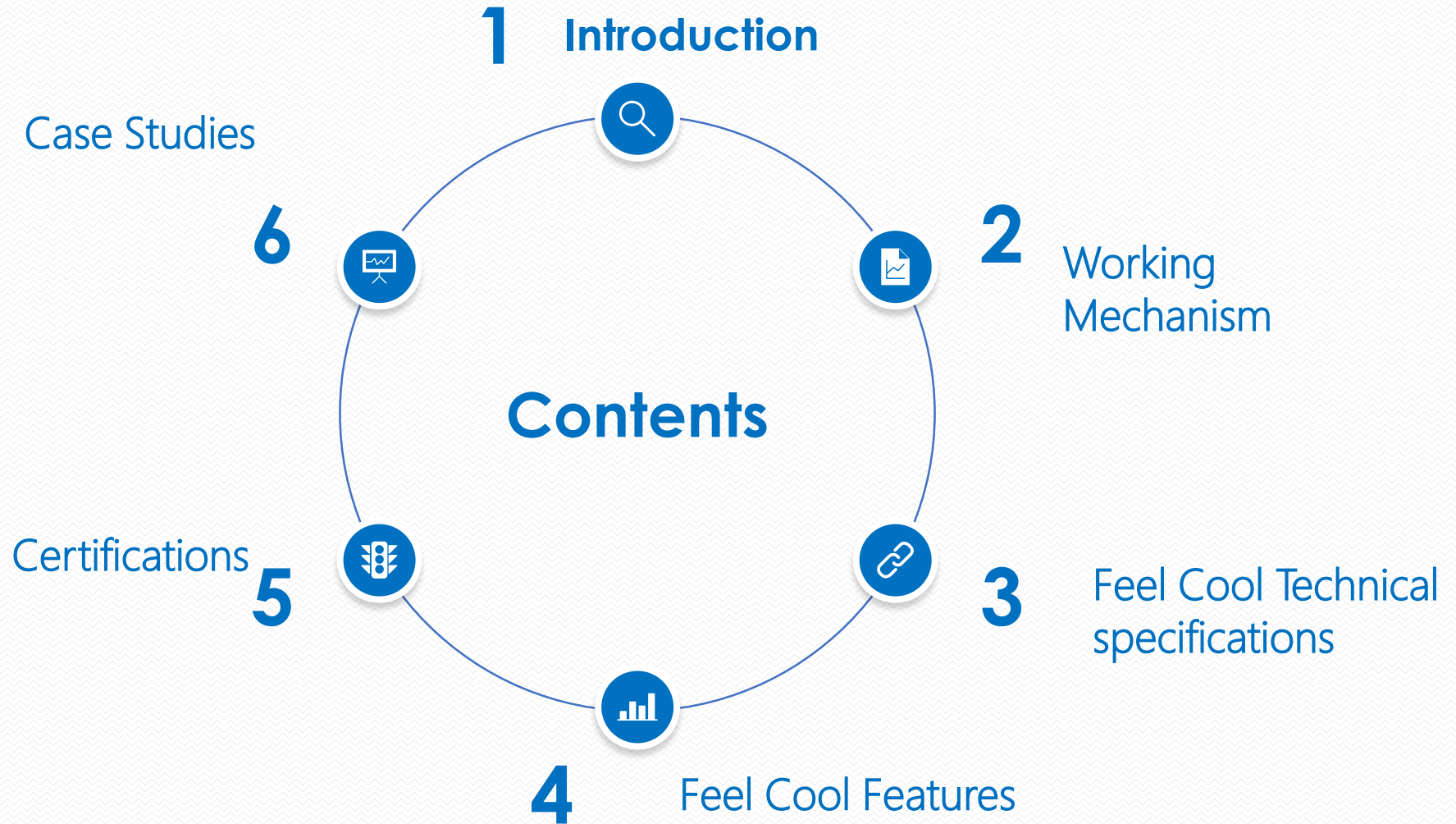




Feel Cool XT

Nano-engineered
Solar Heat Reflective Paint





- Feel Cool XT is a Nano-Engineered Multifunctional Eco-friendly Heat Reflective Paint
- It reflects the heat from solar IR radiation and reduces the heat to that is transferred into the building, which can result in reduced heat and cost, energy savings
- Feel Cool XT contains innovative solar reflective pigments, which is the key differentiator.

Technical Background on Mechanism



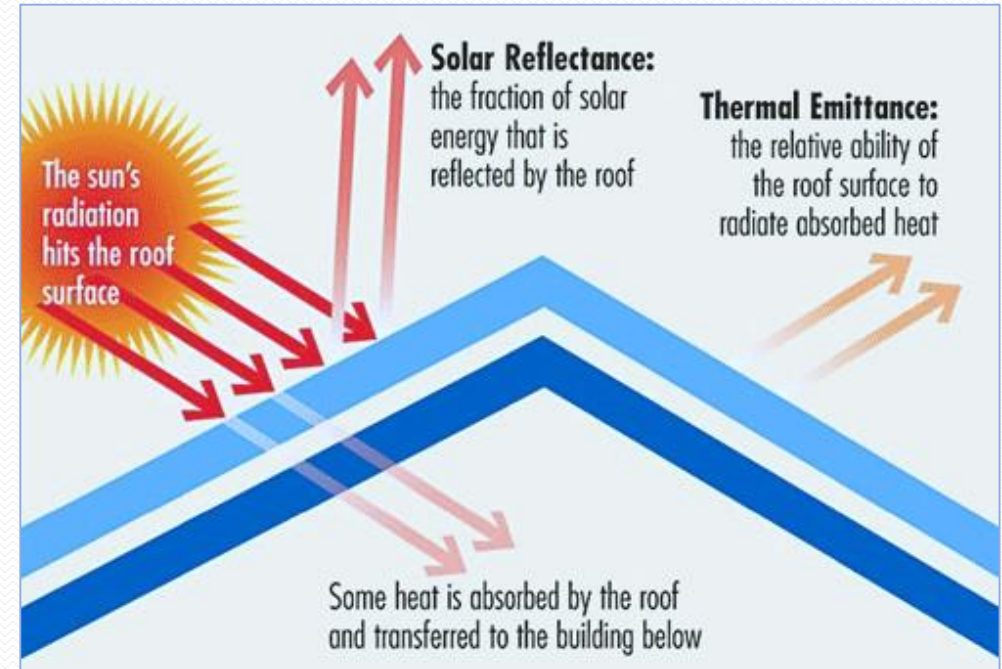
Terms Used in Relation to Cool Roof Coatings

- Solar reflectance- % of Incident Solar heat Reflected
- Emissivity- (also called thermal emittance)- % of absorbed solar heat emitted
- Solar Reflectance Index (SRI)- Index for performance of cool roofs

Cool Roof Rating Council- Guidelines

For a Paint to be called as Cool Roof , they should meet the following

	Initial Value	The value after 3 years
Reflectance	≥0.65	≥0.5
Emittance	≥0.75	≥0.75
SRI	82	65



SRI Formula⁹

- α = solar absorptance = 1 - solar reflectance,
- I = solar flux, $\text{W}\cdot\text{m}^{-2}$,
- ϵ = thermal emissivity,
- σ = Stefan Boltzmann constant, $5.66961 \times 10^{-8} \text{ W}\cdot\text{m}^{-2}\cdot\text{K}^{-4}$,
- T_s = steady-state surface temperature, K,
- T_{sky} = sky temperature, K,
- h_c = convective coefficient, $\text{W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$, and
- T_a = air temperature, K.

$$T_s = 309.07 + \frac{(1066.07\alpha - 31.98\epsilon)}{(6.78\epsilon + h_c)} - \frac{(890.94\alpha^2 + 2153.86\alpha\epsilon)}{(6.78\epsilon + h_c)^2}$$

$$SRI = 100 \frac{T_b - T_s}{T_b - T_w}$$

Feel Cool XT- Specification

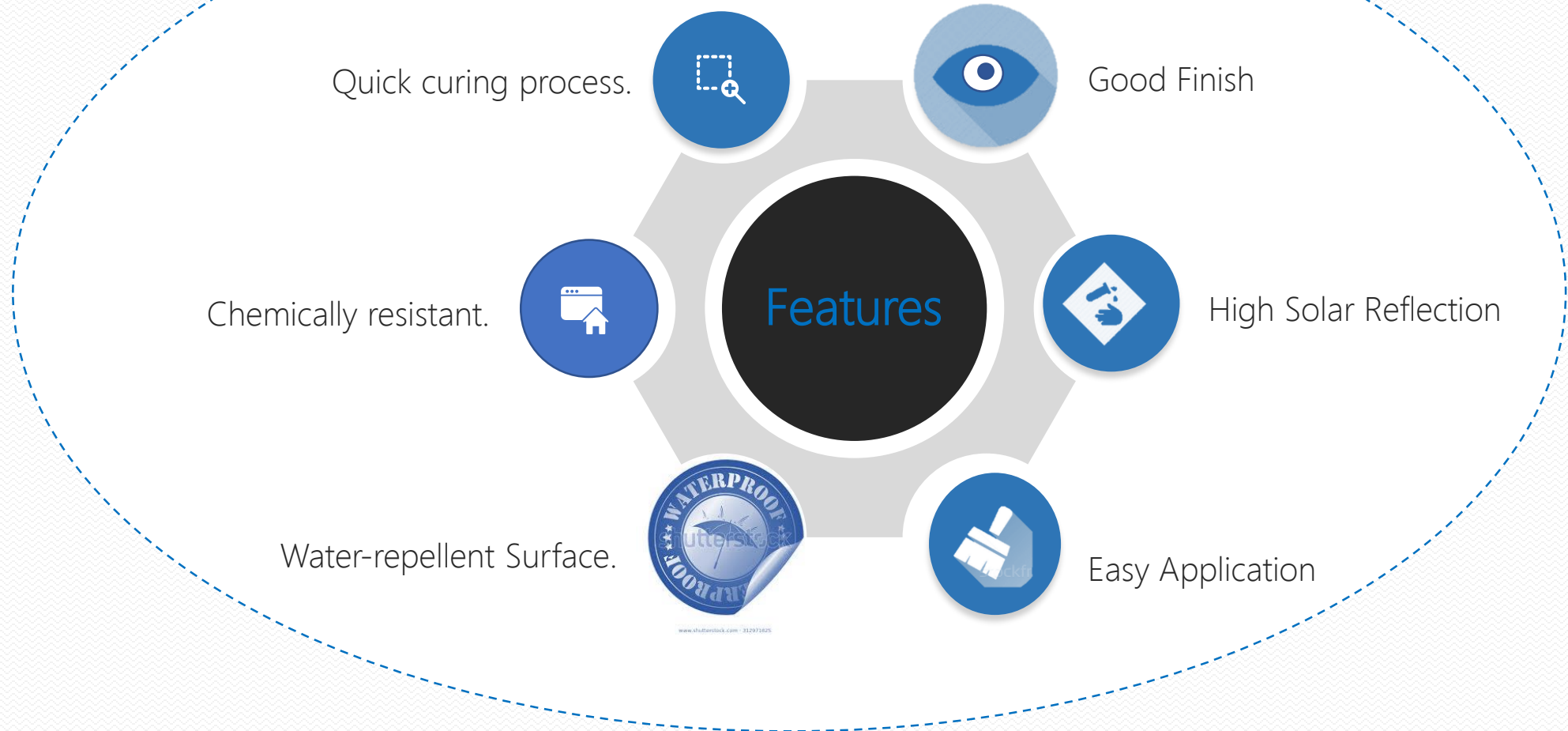


PROPERTIES	RESULTS
Appearance	White colour external emulsion
Colour	White
Solid content	50-60 wt%
Solar reflective index	108
Thermal emittance	0.88
Application Method	Brush
Surface dry time, minutes	45 minutes
Specific gravity @ 30°C, gms/ cc	1.32
Theoretical Spread Rate(sqft/ltr) @ 200 microns DFT	91-100

Feel Cool XT Features



Advanced Nanomaterials



Third Party Certification



The Cool Roof Rating Council (CRRC) is a credible and unbiased, third-party rating program for measuring and reporting the radiative properties of roof surfaces


Feel Cool XT Test Results given by CRRC

	Initial Value	The value after 3 years
Reflectance	0.86	Not yet tested
Emittance	0.88	Not yet tested
SRI	108	Not yet tested

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: INM Nuvent Paints Private Limited No.4, TM Industrial Estate, 12th KM, Mysore Road Bangalore, Karnataka 560059

Product Brand: Feel Cool	Product Type: Coating
Product Model: XT	Initial SRI: 108
Company: INM Nuvent Paints Private Limited	3 Year SRI: Pending
Contact Name: Phani AR	Slope Types: Low
Telephone: 7022816888	Color: Bright White

		Initial	Weathered
	Solar Reflectance	0.86	Pending
Thermal Emittance	0.88	Pending	
Rated Product ID	1310-0001		
Licensed Manufacturer	1310		
Classification	Standard Product		
<small>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 stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.</small>			

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.

			04/23/2019
Technical Reviewer	Application Reviewer	Management Approval	Date

Feel XT Comparison Summary

- Only Paint Indigenously made with certification from CRRC
- High Solar reflective Index
- Excellent Finish

FEEL COOL XT Case Studies

- Locations of the trials carried out

Industry	Location	Date of Coating
SML Unit 2	Raichur, Karnataka	Nov 2017
Company 1	Vishakhapatnam, Andhra Pradesh	Feb 2018

FEEL COOL XT- CASE STUDY

- Painted on Walls,
Solvent Tank tops,
Solvent tank walls.
- 2 layers of paint at 200
microns thickness.
- Status: Working good.



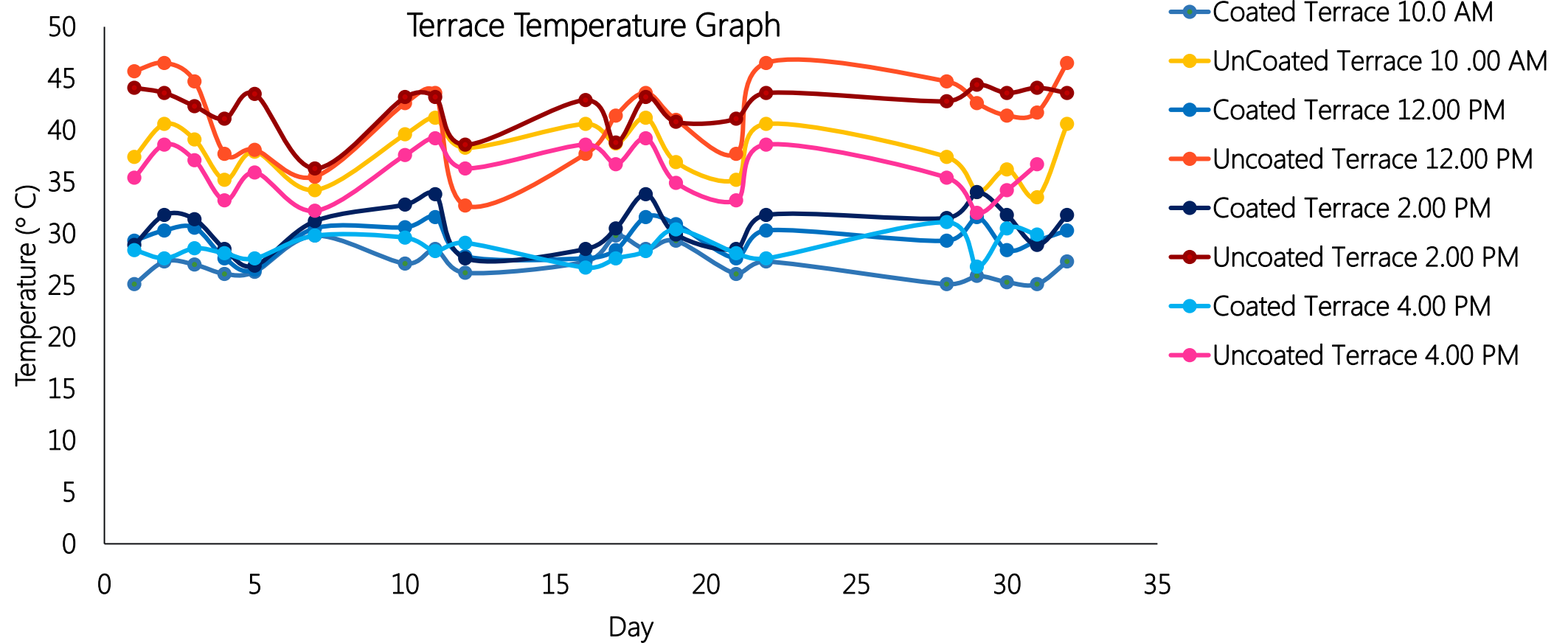
FEEL COOL XT- CASE STUDY

- Two similar buildings were selected
- Terrace of one was coated and the other one was left uncoated
- Roof Temperature and room temperatures were measured at different times in the day



SML Unit 2, Raichur

FEEL COOL XT- CASE STUDY-Raichur



The data indicates that an average difference of 15 degrees is maintained between on the surface of a building coated with feel cool XT and uncoated building



Thank You for Your Kind Attention

For more information please
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