

# REPORT ON COOL PAINT APPLICATION IN SHANABHAI'S HOME MAY 2021

The application of cool paint had been successfully carried out and reported. The temperature measurement with thermal camera carried out in afternoon to target maximum radiation.

The difference of the internal temperature after cool paint application is clearly reflected in the report. The difference of the internal temperature after cool paint application is clearly reflected in the report. The tabular presentation of the results is mentioned below.

Sr. No.	Location	Material of Construction	Before Application °C	After Application °C	% Reduction
1	TERRACE – OUTER FACE	Concrete Slab	62.6	49.5	20.93
2	TERRACE – INNER FACE	Concrete Slab	42.9	39.3	8.39
3	ROOF SHEETS OUTER FACE - COOL PAINT	Corrugated Steel Sheet	72.4	44.9	37.98
4	ROOF SHEETS INNER FACE- COOL PAINT	Corrugated Steel Sheet	69.4	43.0	38.04
5	ROOF SHEETS- OUTER FACE- KHADI PRAKRUTIK PAINT	Corrugated Steel Sheet	72.4	52.6	27.34
6	ROOF SHEETS- INNER FACE- KHADI PRAKRUTIK PAINT	Corrugated Steel Sheet	65.3	44.4	32.00

THE AMBIENT TEMPRATURE WAS 40 °C IN AT 2:30 PM on 3<sup>rd</sup> and 4<sup>th</sup> May 2021.



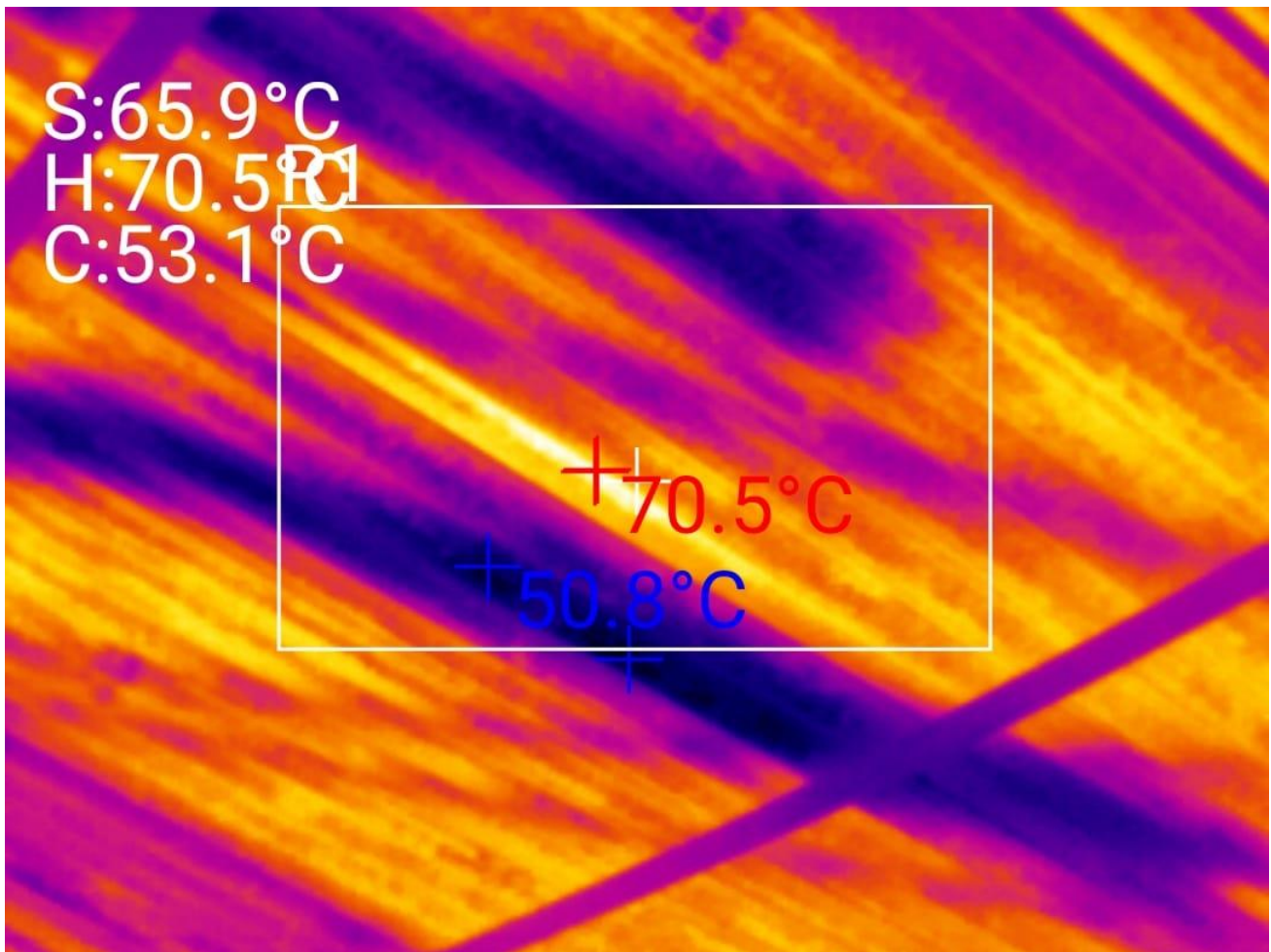
## BEFORE APPLICATION OF COOL PAINT



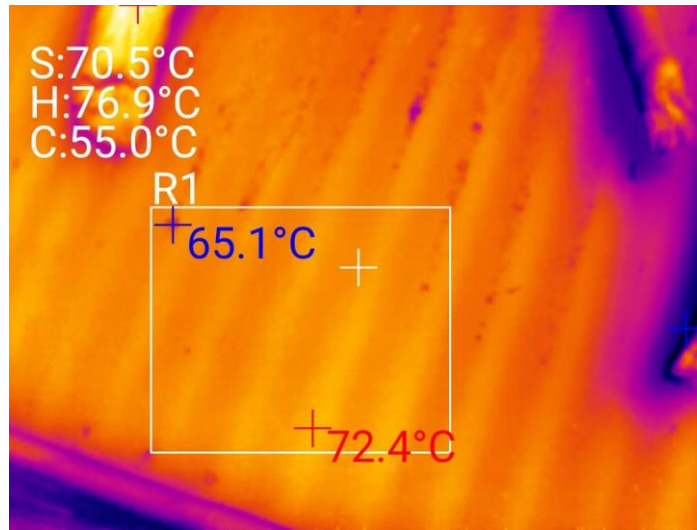
## AFTER APPLICATION OF COOL PAINT



**AFTERNOON DATA BEFORE APPLICATION OF COOL PAINT FOR CORRUGATED  
STEEL SHEETS OUTER FACE, 3<sup>rd</sup> May 2021 (Ambient Temp. 40° C)**

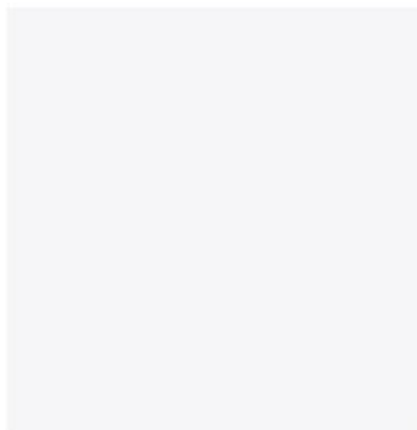
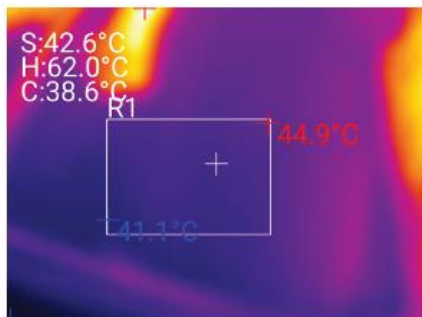


**AFTERNOON DATA BEFORE APPLICATION OF COOL PAINT FOR CORRUGATED STEEL SHEETS OUTER FACE, 4<sup>th</sup> May 2021 (Ambient Temp. 40° C)**



**AFTERNOON DATA AFTER APPLICATION OF COOL PAINT ON CORRUGATED STEEL SHEET OUTER FACE, 11<sup>th</sup> June 2021 (Ambient Temp. 37° C) FOR COOL PAINT**

2021-06-11



IR Image

GPS Image

**GENERAL INFORMATIONS**

File name:	20210611145449.hir	Emissivity value:	0.95
Date of saved image:	20210611145449	Ambient temperature:	25.0°C
GPS info:	22.50639,73.00305	Reflected Temperature:	25.0°C
Max temp value:	61.0°C	Min temp value:	38.0°C

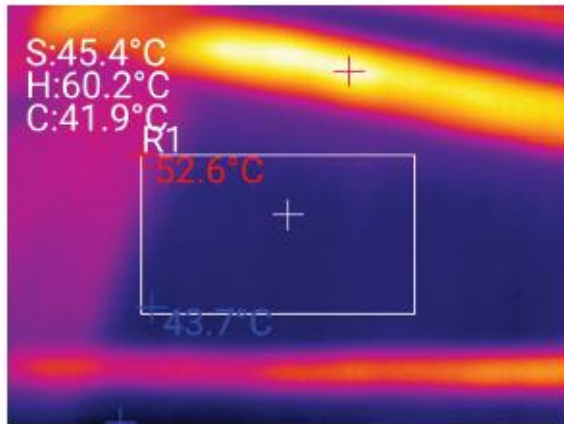
**User Data**

Name	Type	Temp
R 1	Max	44.9°C
	Min	41.1°C
	Average	42.8°C

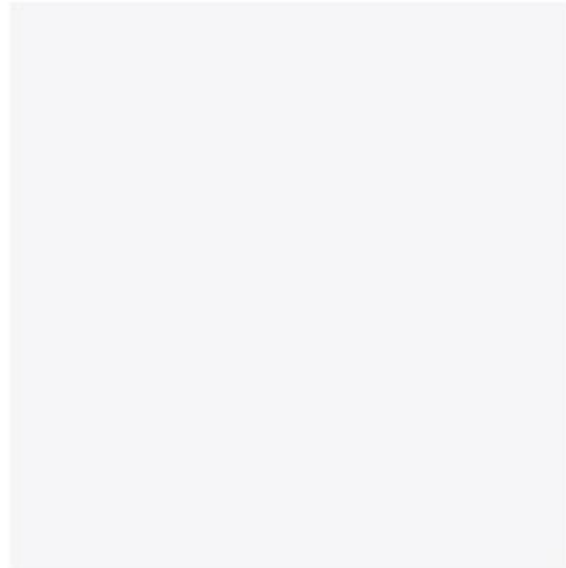
**SO, REDUCTION OF 72.4 – 44.9 = 27.5 °C NOTED**

**AFTERNOON DATA AFTER APPLICATION OF COOL PAINT ON CORRUGATED STEEL SHEET OUTER FACE, 11<sup>th</sup> June 2021 (Ambient Temp. 37° C) FOR KHADI PRAKRUTIK PAINT**

2021-06-11



IR Image



GPS Image

**GENERAL INFORMATIONS**

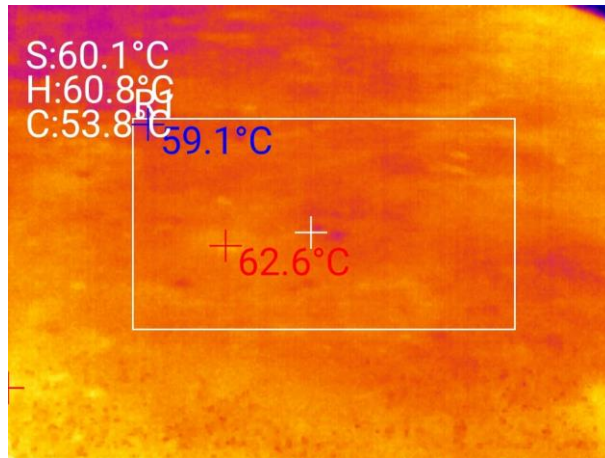
<b>File name:</b>	20210611145437.hir	<b>Emissivity value:</b>	0.95
<b>Date of saved image:</b>	20210611145437	<b>Ambient temperature:</b>	25.0°C
<b>GPS info:</b>	22.503056,73.00472	<b>Reflected Temperature:</b>	25.0°C
<b>Max temp value:</b>	63.0°C	<b>Min temp value:</b>	42.0°C

**User Data**

Name	Type	Temp
R 1	Max	52.6°C
	Min	43.7°C
	Average	45.9°C

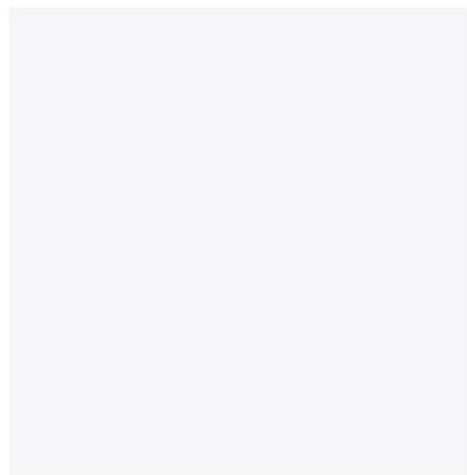
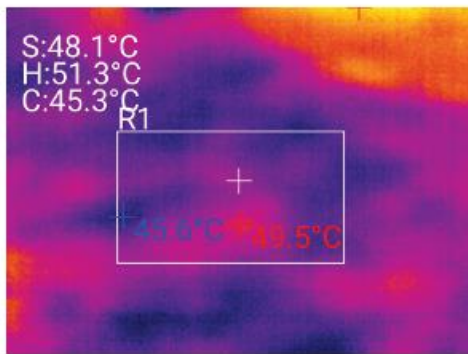
**SO, REDUCTION OF 72.4 – 52.6 = 19.8 °C NOTED. THE DIFFERENCE IN REDUCTION OF OUTER SURFACE TEMPERATURE IS OBSERVED TO BE 27.5-19.8 = 7.7 °C. SO, FURTHER TECHNOECONOMIC COMPARASION SHOULD BE CARRID OUT BETWEEN KHADI PRAKRUTIK PAINT AND COOL PAINT TO EVALUATED OPTIMUM PAINT APPLICATION.**

**AFTERNOON DATA BEFORE APPLICATION OF COOL PAINT FOR RCC SLAB  
OUTER FACE, 4<sup>th</sup> May 2021 (Ambient Temp. 40° C)**



**AFTERNOON DATA AFTER APPLICATION OF COOL PAINT FOR RCC SLAB OUTER  
FACE, 11<sup>th</sup> June 2021 (Ambient Temp. 37° C)**

2021-06-11



IR Image

GPS Image

**GENERAL INFORMATIONS**

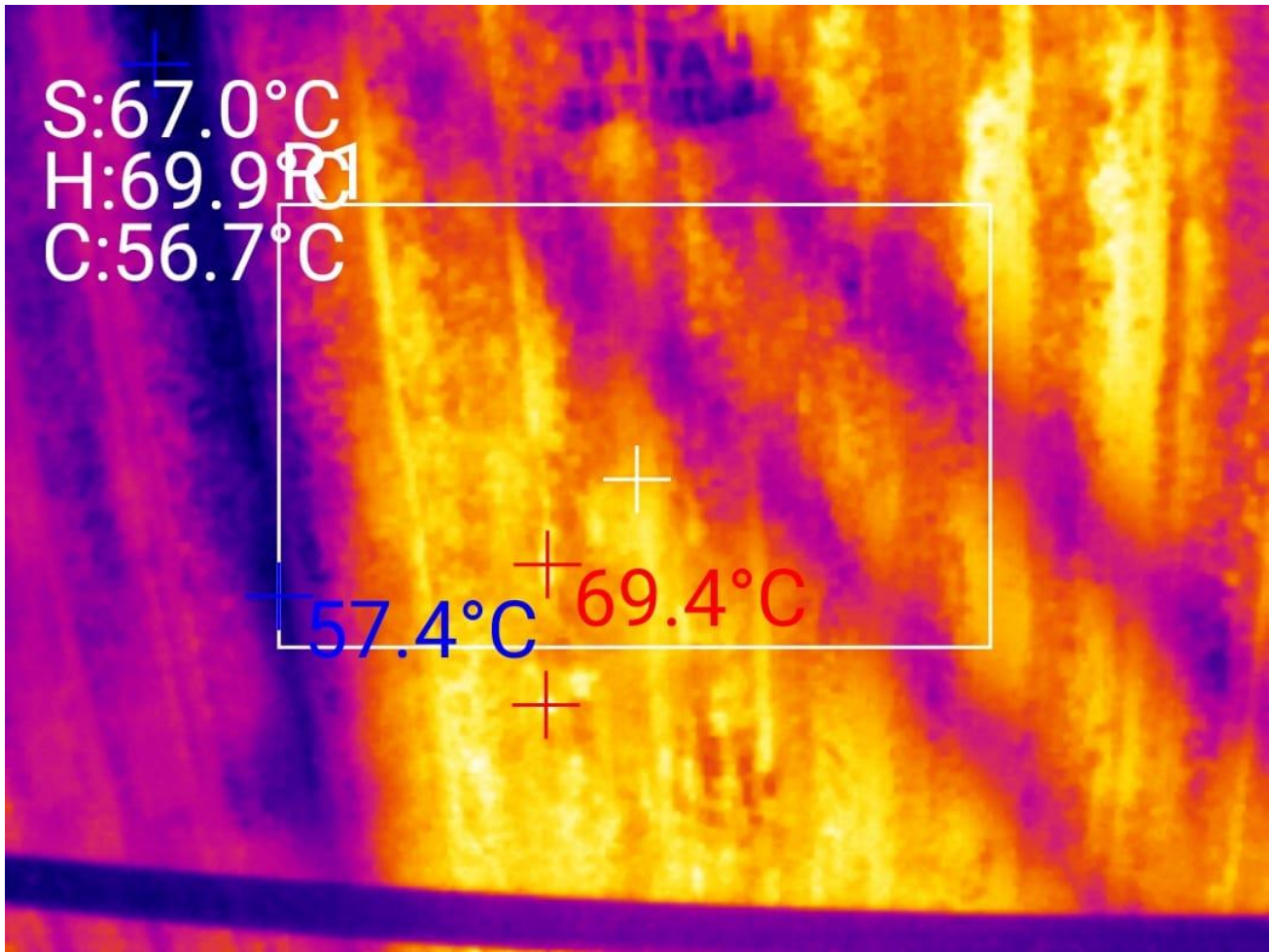
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<b>Date of saved image:</b>	20210611145425	<b>Ambient temperature:</b>	25.0°C
<b>GPS info:</b>	22.503056,73.00472	<b>Reflected Temperature:</b>	25.0°C
<b>Max temp value:</b>	51.0°C	<b>Min temp value:</b>	45.0°C

**User Data**

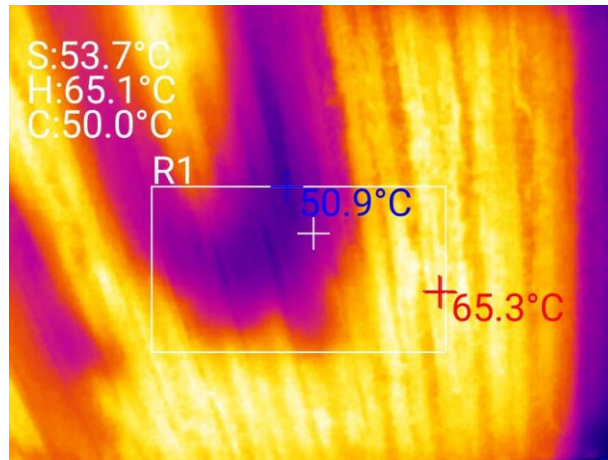
Name	Type	Temp
R 1	Max	49.5°C
	Min	45.6°C
	Average	47.6°C

**SO, REDUCTION OF 62.6 – 49.5 = 13.1 °C OBSERVED.**

**AFTERNOON DATA BEFORE APPLICATION OF COOL PAINT FOR CORRUGATED  
STEEL SHEETS BOTTOM FACE, 3<sup>rd</sup> May 2021 (Ambient Temp. 40° C)**

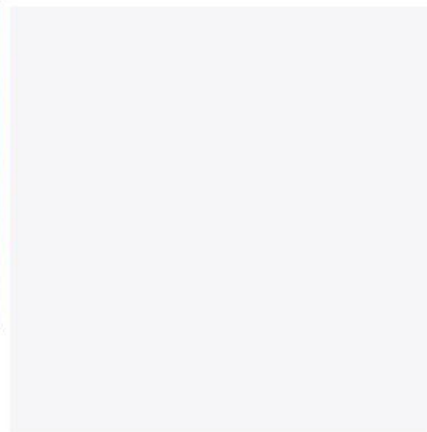
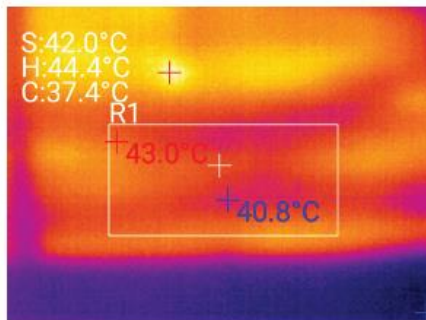


**AFTERNOON DATA BEFORE APPLICATION OF COOL PAINT FOR CORRUGATED STEEL SHEETS BOTTOM FACE, 4<sup>th</sup> May 2021 (Ambient Temp. 40° C)**



**AFTERNOON DATA AFTER APPLICATION OF COOL PAINT ON CORRUGATED STEEL SHEET BOTTOM FACE, 11<sup>th</sup> June 2021 (Ambient Temp. 37° C) COOL PAINT**

2021-06-11



IR Image

GPS Image

**GENERAL INFORMATIONS**

<b>File name:</b>	20210611145108.hir	<b>Emissivity value:</b>	0.95
<b>Date of saved image:</b>	20210611145108	<b>Ambient temperature:</b>	25.0°C
<b>GPS info:</b>	22.503056,73.00472	<b>Reflected Temperature:</b>	25.0°C
<b>Max temp value:</b>	44.0°C	<b>Min temp value:</b>	37.0°C

**User Data**

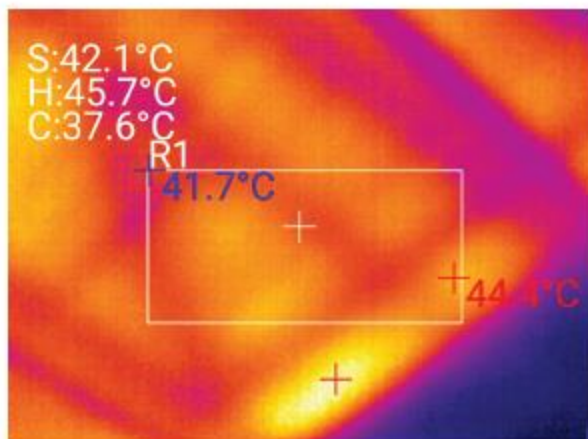
Name	Type	Temp
R 1	Max	43.0°C
	Min	40.8°C
	Average	42.1°C

**SO, REDUCTION OF 65.3 – 43.0 = 22.3 °C OBSERVED FOR COOL PAINT**

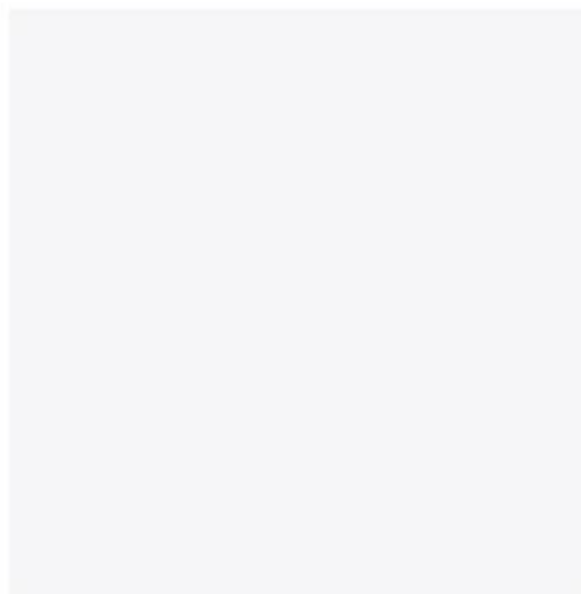


**AFTERNOON DATA AFTER APPLICATION OF COOL PAINT ON CORRUGATED STEEL SHEET BOTTOM FACE, 11<sup>th</sup> June 2021 (Ambient Temp. 37° C) KHADI PRAKRUTIK PAINT**

2021-06-11



IR Image



GPS Image

**GENERAL INFORMATIONS**

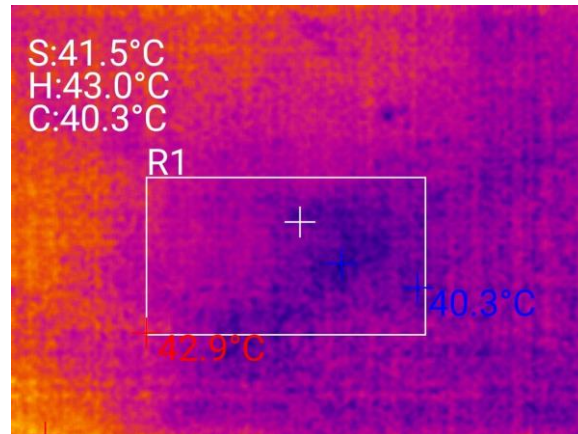
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<b>Date of saved image:</b>	20210611145010	<b>Ambient temperature:</b>	25.0°C
<b>GPS info:</b>	22.503056,73.00472	<b>Reflected Temperature:</b>	25.0°C
<b>Max temp value:</b>	45.0°C	<b>Min temp value:</b>	37.0°C

**User Data**

Name	Type	Temp
R 1	Max	44.4°C
	Min	41.7°C
	Average	42.8°C

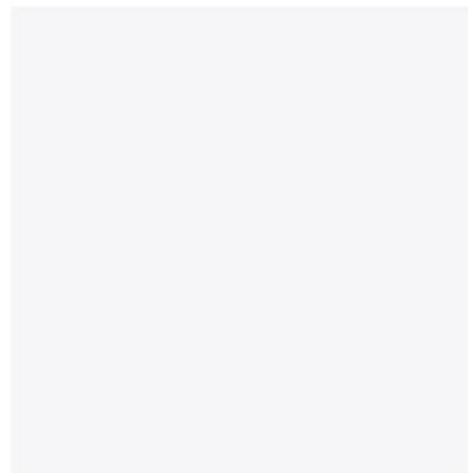
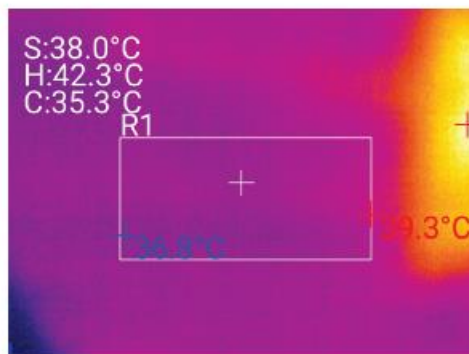
**SO, REDUCTION OF 65.3 – 44.4 = 20.9 °C OBSERVED FOR KHADI PRAKRUTIK PAINT. THUS, DIFFERENCE IN REDUCTION IS 22.3-20.9=1.4 °C ONLY BETWEEN COOL PAINT AND KHADI PRAKRUTIK PAINT. MORE EXPERIMENTS AND ECONOMIC ANALYSIS SHOULD BE CARRIED OUT TO FIND OUT THE OPTIMUM PAINT.**

**AFTERNOON DATA BEFORE APPLICATION OF COOL PAINT FOR RCC SLAB  
BOTTOM FACE, 4<sup>th</sup> May 2021 (Ambient Temp. 40° C)**



**AFTERNOON DATA AFTER APPLICATION OF COOL PAINT FOR RCC SLAB  
BOTTOM FACE, 11<sup>th</sup> June 2021 (Ambient Temp. 37° C)**

2021-06-11



IR Image

GPS Image

**GENERAL INFORMATIONS**

File name:	20210611145032.hir	Emissivity value:	0.95
Date of saved image:	20210611145032	Ambient temperature:	25.0°C
GPS info:	22.503056,73.00472	Reflected Temperature:	25.0°C
Max temp value:	42.0°C	Min temp value:	35.0°C

**User Data**

Name	Type	Temp
R 1	Max	39.3°C
	Min	36.8°C
	Average	38.1°C

**SO, REDUCTION OF 40.3 – 39.3 = 1 °C OBSERVED. HERE ALSO REDUCTION IN TEMPERATURE IS LESS FOR SLAB AS OBSERVED IN ANGANWADI.**