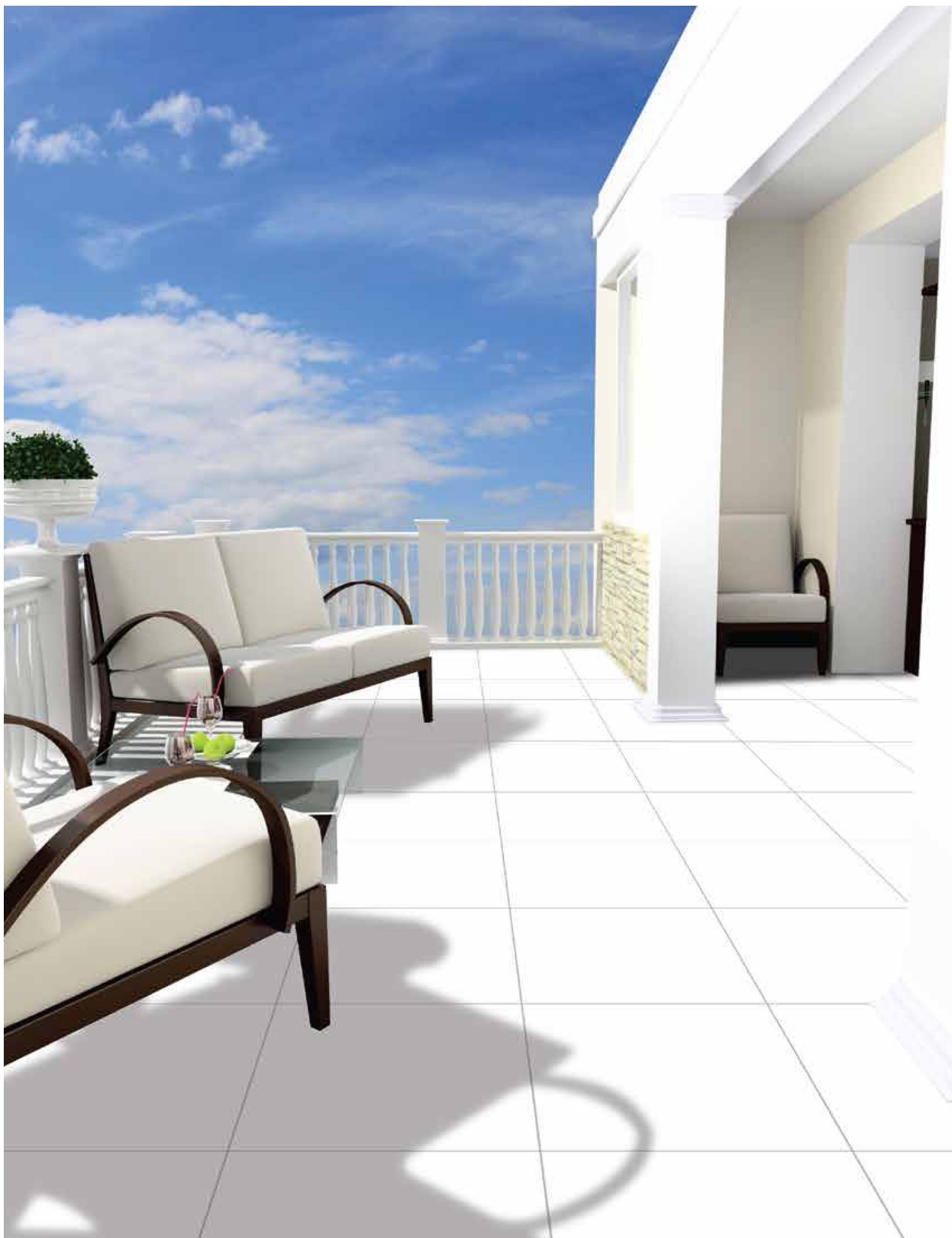


# Cool TILES™

KEEPS TEMPERATURE DOWN UP TO 7-8 DEGREES CELSIUS







# COOL TILES™

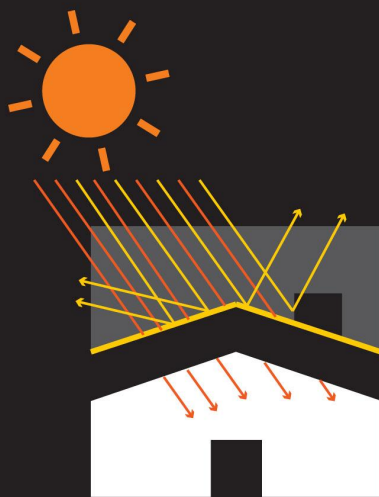
Orient Bell Cool Tiles have an amazing Solar Reflective Index (SRI) value of 103. They reflect solar heat which helps bring the inside building temperature down up to 7-8 degrees Celsius, reducing cooling requirement and saving costs while helping in the fight against global warming.



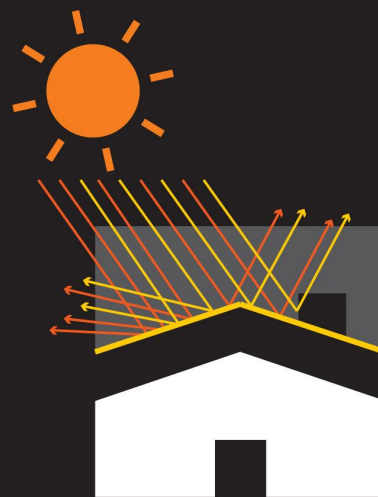
# SRI and Cool Roof Technology

SRI (Solar Reflective Index) measures the roof's ability to reject solar heat (reflectance) and the ability to emit heat. The technology works by using zirconium and other special minerals in the glaze. A special process to fuse these minerals in the glaze to create a special intricate structure has been devised.

- Indian Green Building Council uses SRI as a way to evaluate a cool roof.
- Indian Green Building Council recommends buildings should use a roof with minimum SRI value of 78 to keep indoors cool and reduce air conditioning and electricity consumption.
- Orient Bell Cool Tiles have an SRI value of 103 which is highest in the industry.



Normal Roof Tile



SRI Tile

 Visible Light Waves

 Ultra Violet Waves



### **Are All White Matt Tiles Cool Tiles?**

Orient Bell Cool Tiles are available in white colour and matt finish. Although white colour has better solar reflective qualities, the real invention in Cool Tiles is not the colour but the materials used, tile making process and the special structure of the surface. Cool Tiles have much higher SRI value than any other white

# Test Reports



## BUILDING ENERGY PERFORMANCE LABORATORY

### Test Report for Solar Reflectance Index (SRI)

Report No: BEPL/RPT/SRI/81

Report Date: 6<sup>th</sup> February 2013

#### 3. Results of the measurement:

##### Solar Direct Reflectance

Sample name	Sample ID	Measurement 1	Measurement 2	Measurement 3	Average
300 x 300 Cool Tile- OBL-HSK-1	SRI/02/13/1082	0.8246	0.8234	0.8238	0.8239

##### Emissivity

Sample name	Sample ID	Measurement 1	Measurement 2	Measurement 3	Average
300 x 300 Cool Tile- OBL-HSK-1	SRI/02/13/1082	0.875	0.876	0.875	0.875

##### Solar Reflectance Index (SRI) under different wind conditions

Sample name	Sample ID	Solar Reflectance Index (SRI)		
		Low Wind( $h_c = 5 \text{ W m}^{-2} \text{ K}^{-1}$ )	Medium Wind( $h_c = 12 \text{ W m}^{-2} \text{ K}^{-1}$ )	High Wind( $h_c = 30 \text{ W m}^{-2} \text{ K}^{-1}$ )
300 x 300 Cool Tile- OBL-HSK-1	SRI/02/13/1082	103	103	103

##### Surface Temperature ( $T_s$ ) under different wind conditions

Sample name	Sample ID	Surface Temperature ( $^{\circ}\text{C}$ )		
		Low Wind( $h_c = 5 \text{ W m}^{-2} \text{ K}^{-1}$ )	Medium Wind( $h_c = 12 \text{ W m}^{-2} \text{ K}^{-1}$ )	High Wind( $h_c = 30 \text{ W m}^{-2} \text{ K}^{-1}$ )
300 x 300 Cool Tile- OBL-HSK-1	SRI/02/13/1082	47.5	43.5	40.2

#### 4. Certificate of Accuracy:

This is to certify that the test results herein presented are, to the best of my knowledge, true and accurate representations of the samples submitted.

Dr. V. P. Patil  
Technical Director  
Building Energy Performance Laboratory

#### Disclaimer:

1. The CSEE / BEPL are not responsible for any kind of alterations in the physical property of the sample and the customer is solely responsible for it and its consequences.
2. Result relates to the sample tested only. Sample will be destroyed after 7 days of issue of the report unless specified by the customer.
3. Any complains about this report should be communicated in writing within 7 days of issue of the report.
4. The test report shall not be reproduced fully or partially or in parts and cannot be used as an evidence in a court of law and shall be used in advert singeing media without written approval of Executive Director. BEPL





## BUILDING ENERGY PERFORMANCE LABORATORY

### Test Report for Solar Reflectance Index (SRI)

Report No: BEPL/RPT/SRI/81

Report Date: 6<sup>th</sup> February 2013

#### Report of test carried out by CEPT – CSEE: BEPL for Solar Reflectance Index of Supplied Material

The test results of the specimen submitted for Solar Reflectance Index on date 4<sup>th</sup> February 2013 are as under:

#### 1. Customer Information

- 1.1. Name of the Organization : Orient Bell Limited:  
1.2. Contact Person : Mr. G.S.Tyagi  
1.3. Address : 8-Industrial Area,  
Sikandrabad,  
Dist. Buland Sahar, U. P.  
Pin-203205  
  
1.4. Phone Numbers : 05735-222203/222424  
1.5. Fax Number : 05735-222642  
1.6. Email : gs.tyagi@orientbell.com

#### 2. Sample Details

- 2.1 Sample Identification Number : SRI/02/13/1082  
2.2 Date of Test : 5<sup>th</sup> February 2013  
2.3 Name and any other pertinent  
identification of the material (including physical description): 300 x 300 Cool Tile - OBL-HSK-1  
2.4 Thickness of the specimen (Reported) : 7.3 mm  
2.5 Thickness as tested : Not Applicable  
2.6 Condition of Sample During receipt : Satisfactory  
2.7 Method and Environment used for conditioning (if used) : Not Applicable  
2.8 No. of Surfaces : Not Applicable  
2.9 The type of surfaces : Not Applicable  
2.10 Position of panes (if Multiple Glazed) : Not Applicable  
2.11 The position of coating(s) designating faces of the panes as 1, 2, 3 starting from the outer surface of pane 1:  
Not Applicable  
2.12 The face of the panes (if Coated) : Not Applicable  
2.13 Instrument used : Spectrophotometer with integrating sphere with reference material  
spectralone & FTIR with IR specular reflection set.  
2.14 Boundary Conditions (Test Method) : As per ASTM E 1980, EN 673, and EN 410.  
2.15 Tested By : Mr. Jigar Patel, Lab Technician



### Certifications





## Product Benefits



Better Indoor  
Comfort



Savings on  
Electricity Bill



Lower Emission of  
Greenhouse & CFC Gases



Reduces Load on  
Cool Appliances

## Application Areas

- Building Terraces
- Pavements
- Exterior Walls Exposed to Sunlight
- Balconies

# Our Prestigious Projects

- A to Z Builders, Meerut (Uttar Pradesh)
- Paharpur Business Centre
- Infra Projects
- Ramsons



Size Specifications: 300x300 mm



- IIT Patna (Terrace of 1,00,000 sq. ft. - Administration Building, Hostels & College Building)
- Kalawati Builders, Agra
- Trident Realty







**CORPORATE OFFICE:**

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Tel: +91-11-47119100, Fax: +91-11-2852 1273

**REGISTERED OFFICE:**

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Tel: +91-5735-222-203 / 424, +91-8191004575 / 76  
Fax: +91-5735 222 642

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Toll Free: 1800 208 1015

CIN: L14101UP1977PLC021546

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