

**KEEP YOUR  
BUILDING  
COOL  
THIS SUMMER**



**COOL<sup>®</sup>**  
T I L E S

**With SRI Value - upto 98\***

**APPLICATION AREAS:**

**Building Terraces | Exterior Walls | Pavements | Balconies**

**Size: 300x300 mm**

\*Please ask the dealer for specific SRI value on a lot/batch.





**Cool**<sup>®</sup>  
T I L E S

With SRI Value - upto 98\*

# 5 Coolest Benefits with OBL Cool Tiles



## Comfortable Interiors

Summer responsive Roof and walls reduce the room temperature



## Environment Care

IGBC (Indian Green Building Council) & GRIHA certified hence part of Green Building Movement



## Energy Saving

Cooler interiors Roof and walls reduce the room temperature



## Innovative Use

Security Guard Cabin,  
Roof Top water Tanks (outer wall)



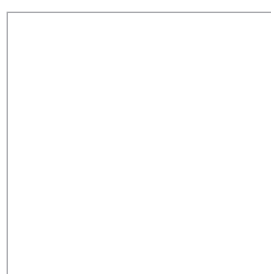
## Additional Advantage

Slip Resistant.  
Cooler surface to Walk on.



*\*SRI Value tested by Verified laboratories for both the manufacturing plants.*

From Sikandarabad



300x300mm |  
ORIENT COOL TILES (EC) BIANCO  
Floor Tile

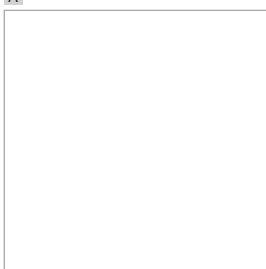
From Sikandarabad



300x300mm |  
ORIENT EC COOL TILES  
Paver Tile



A



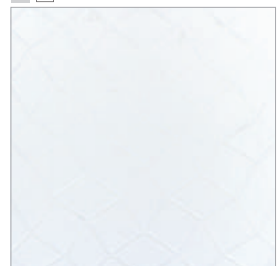
G5  
F1  
R1

300x300mm |  
PAV COOL TILE WHITE  
Paver Tile

From Hoskote



A P



G5  
F1  
R1

300x300mm |  
HULK COOL WHITE  
Paver Tile

# Test Report

Cool Tiles - SKD Plant

**CRDF** CEPT Research & Development Foundation  
Test Report for Solar Reflectance Index (SRI)

ULR-TC70202000000187F Report Date: 20<sup>th</sup> February 2020

Report No: CRDF/RPT/SRI/493  
Report of test carried out by CEPT Research & Development Foundation for Solar Reflectance Index of Supplied Material  
The test results of the specimen submitted for Solar Reflectance Index on date 18<sup>th</sup> February 2020 are as under.

## 1. Customer Information

i. Name of the Organization

: Orient Bell Limited

ii. Contact Person

: Mr. Amit Kumar

iii. Address

: B - Industrial Area,  
Sikandrabad - 203205

iv. Phone Numbers

: 05735-222203 / 7055212549

v. Fax Number

: Not Applicable

vi. Email

: amit.kumar3@orientbell.com

## 2. Photometry Testing

### 2.1 Glazing Materials

: SRI/02/20/1494

: 19<sup>th</sup> February 2020

: 300 x 300 Ceramic Tile

ted): 7.3 mm

: Not Applicable

sd): Satisfactory

: conditioning (if used): Not Applicable

: Not Applicable

: Not Applicable

sd): Not Applicable

iting faces of the panes as 1, 2, 3 starting from the outer surface of pane 1:

: Not Applicable

: Not Applicable

: Spectrophotometer with integrating sphere with reference material  
Spectralone & FTIR with IR specular reflection set.

sd): ASTM E 1980-19, EN 12896:2019, EN 673:2011, and EN 410:2011



*Yashkumar Shukla*  
Yashkumar Shukla  
Technical Director

CEPT Research & Development Foundation, CEPT University, K. L. Campus, Navrangpura, Ahmedabad-380 005.  
& Development Foundation, CEPT University, K. L. Campus, Navrangpura, Ahmedabad-380 005.  
Phone No: 079-26302470- Extn: 363, 26302740 Fax: +91 79 26302075 Email: ashajoshi@cepf.ac.in  
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**CRDF** CEPT Research & Development Foundation  
Test Report for Solar Reflectance Index (SRI)

ULR-TC70202000000187F Report Date: 20<sup>th</sup> February 2020

Report No: CRDF/RPT/SRI/493

## 2.1.2 Results of the measurement:

### Solar Direct Reflectance

Sample name	Sample ID	Measurement 1	Measurement 2	Measurement 3	Average
300 x 300 Ceramic Tile	SRI/02/20/1494	0.7825	0.7825	0.7831	0.7827

### Emissivity

Sample name	Sample ID	Measurement 1	Measurement 2	Measurement 3	Average
300 x 300 Ceramic Tile	SRI/02/20/1494	0.890	0.889	0.887	0.889

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

Sample name	Sample ID	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 Ceramic Tile	SRI/02/20/1494	97	97	98

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

Sample name	Sample ID	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 Ceramic Tile	SRI/02/20/1494	50.9	45.6	41.3

Remark, if Any:

## 3 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.

*N.D. Bhesaniya*  
Nikhil Bhesaniya  
Lab. Technician



*Yashkumar Shukla*  
Yashkumar Shukla  
Technical Director

### Disclaimer:

- The CEPT Research & Development Foundation is 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.
- The test results and the statement of compliance with specification in this report relate only to the test sample as tested and not to the sample/item from which the test sample was drawn. Sample will be destroyed after 7 days of issue of the report unless specified by the customer.
- Any complaints about this report should be communicated in writing within 7 days of issue of the report.
- 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 advertising media without written approval of Director, CEPT Research & Development Foundation.

CEPT Research & Development Foundation, CEPT University, K. L. Campus, Navrangpura, Ahmedabad-380 005.  
Phone No: 079-26302470- Extn: 363, 26302740 Fax: +91 79 26302075 Email: ashajoshi@cepf.ac.in  
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# NEWTECH TILES AND PAVERS TESTING LABORATORY

AP-21(Old), 1st Floor, 1st Street, 1st Sector, K.K. Nagar, Chennai - 600 078.  
(Regd. Ministry of Micro, Small, Medium Enterprises - Govt. of India)



Certificate No: SRI/040

NTPTL/2020-21

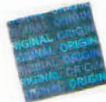
## CERTIFICATE

Ref. No: NTPTL/040/2020-21	Date of Receipt: 09/07/2020 Date of Issue: 18/07/2020	No. of Pages: 1/1 Size: 300x300x 9.5mm	
Sample Description : Ceramic Tile - "Cool White"			
Sample Submitted by: M/s Orient Bell Limited Vill-Chokkahalli, Taluk-Hoskote, Bangalore (Rural) - 562114, Karnataka, India			
Issued in favour of: M/s. M/s Orient Bell Limited Vill-Chokkahalli, Taluk-Hoskote, Bangalore (Rural) - 562114, Karnataka, India			
Reference: Letter dated 09.07.2020			
Test Method: ASTM: C-1549; ASTM: C-1371 and ASTM: E-1980			
TEST PARAMETER	METHOD	OBTAINED VALUES (Average)	
Solar Absorptance	ASTM:C-1549	0.248	
Solar Reflectance	ASTM:C-1549	0.752	
Thermal Emissivity	ASTM:C-1371	0.86	
Solar Reflectance Index (SRI Value)	ASTM:E-1980	92	
Surface Temperature with Solar Reflectance Index (SRI Value) under different wind conditions			
Wind Condition	Low Wind (0-2 m/s)	Medium Wind (2-6 m/s)	High Wind (6-10 m/s)
	53.9 °C	47.5 °C	42.2 °C
Surface Temperature (°C)	91.5	92.4	92.9
Solar Reflectance Index (SRI Value)	(wave length range: 0.3 - 2.5µm): for Solar Absorptance & Solar Reflectance		
Instruments Used: 1. Solar Spectrum Reflectometer	2. Emissometer (wave length range: 3-30 µm) : for Thermal Emissivity		

The results relate only to the sample tested. The test report should not be utilized for any legal purposes and will not be produced in the court of law and no responsibility will be attached to the Centre

This Certificate is issued under the conditions mentioned overleaf

AUTHORIZED SIGNATORY  
(A. RAJKUMAR)



Email : ntp19@gmail.com / arknm1@gmail.com url: http://www.tiletestinglaboratory.com Mobile : 9444045044 / Ph : 044-24895044



## GRIHA Council

This is to certify that the product of  
**Orient Bell Limited**

**“Orient Bell Cool Tiles”**

have been included in the GRIHA Product Catalogue  
under the following categories:

**GRIHA V.3 criterion: 5 & 14**

**GRIHA V.2015 criterion: 3 & 8**

**&**

**SVAGRIHA criterion: 2 & 5**

These products can be used in GRIHA & SVAGRIHA registered projects to meet the GRIHA & SVAGRIHA norms, respectively. This is valid only for the products which have been mentioned above.

The certificate for the above mentioned products is valid from  
**6<sup>th</sup> September 2021 – 5<sup>th</sup> September 2023**

**Sanjay Seth**  
Chief Executive Officer

*Note: This evaluation has been done based on the documentation - in the form of 3rd party test results and/or declarations - submitted by the manufacturer to GRIHA Council.*

GRIHA Council is a joint initiative of Ministry of New and Renewable Energy, Government of India and The Energy and Resources Institute (TERI) to implement GRIHA (Green Rating for Integrated Habitat Assessment), India's National Rating System for Sustainable Habitats.  
[www.grihaindia.org](http://www.grihaindia.org)

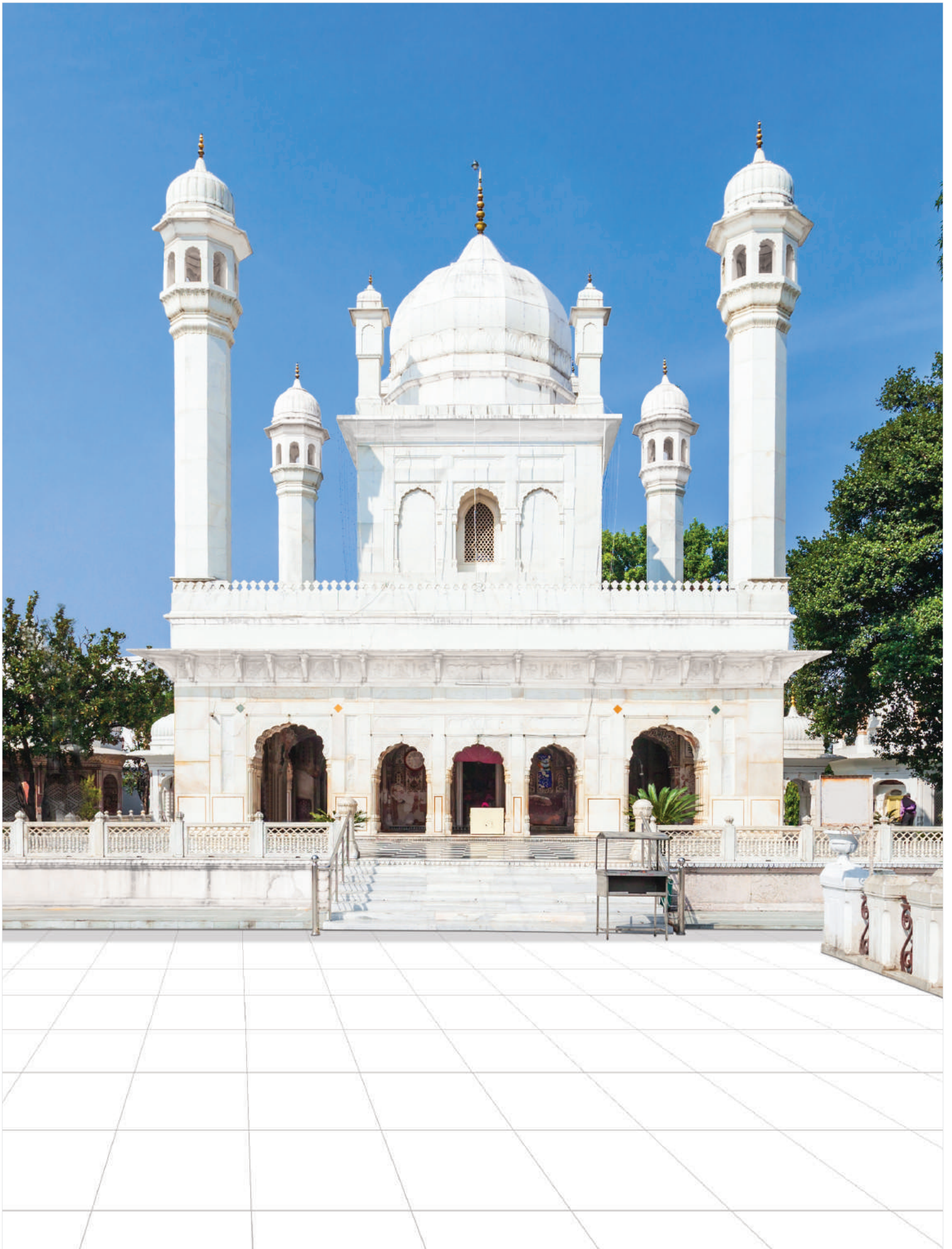




Use OBL Cool Tiles on sun facing walls



Give your security guard some comfort this summer



Walk barefoot with ease in summers

# TECHNICAL SPECIFICATIONS

## Cool Tile (Floor) from Sikandarabad

### Packing Details

Size ( In mm. )	No. of Tiles Per Carton	Covered Area Per Carton	
		( In Sq. Mtr. )	( In Sq. ft. )
300X300 (Cool Tile)	12	1.08	11.63

### (3<E≤6% Group BIIa) as per IS 15622:2017

(3<E<6% Group BIIa) as per IS 15622:2017				
Characteristics	Test Method	Requirement as per IS 15622:2017 3<E≤6 (Group B IIa)		OBL Value
Dimension & Surface Quality		Unrectified	Rectified	
Deviation in Length & Width	IS 13630 Part1	± 0.4 %	± 0.1 %	± 0.1 %
Deviation in Thickness		± 5.0 %		± 4.0 %
Straightness of Sides		± 0.3 %	± 0.1 %	± 0.1 %
Rectangularity		± 0.3 %	± 0.1 %	± 0.1 %
Surface Flatness		±0.5%		± 0.2 % 😊😊
Surface Quality		Min. 95 % tiles shall be free from visible defects that would impair the appearance of a major area of the tile		Conforms
Physical Properties				
Water Absorption %	IS 13630 Part 2	Average 3<E≤6%, individual 6.2% Max.		3-6% 😊😊
Modulus of Rupture in [N/mm <sup>2</sup> ]	IS 13630 Part 6	Average 22, individual 20, Min		Min 30 N/mm <sup>2</sup> 😊😊
Breaking Strength in N	IS 13630 Part 6	600 Min for thickness <7.5 mm, 1000 Minimum for thickness ≥ 7.5 mm		Min 700 N 😊😊
Moisture Expansion	IS 13630 Part 3	0.03 Max		Conforms
Scratch Hardness (Moh's Scale)	IS 13630 Part 13	4 Min		4 Min 😊
Resistance to Surface abrasion of glaze tiles Class I to V (Applicable for floor applications only)	IS 13630 Part 11	Class II Min		Class II to IV (Depending on surface)
Linear thermal expansion Co-efficient	IS 13630 Part 4	9x10 <sup>-6</sup> , Max		Conforms
Thermal Shock Resistance	IS 13630 Part 5	10 Cycles, Min		Passed
Crazing Resistance	IS 13630 Part 9	4 Cycles at 7.5 Bar, Min		Passed
Impact Resistance	IS 13630 Part 14	0.55, Min		Min 0.60
Frost Resistance	IS 13630 Part 10	Required if agreed to between manufacturer and purchaser		Passed
Chemical Properties				
Resistance to staining of Glazed Tiles	IS 13630 Part 8	Class I Min		Min. Class-1
Resistance to Household Chemicals		Class AA, Min		Min. Class-AA
Resistance to acids and alkalis (Except HF)		Require If Agreed		Min. Class-AA

NOTE: Certain amount of Size and Shade variation is inherent in all ceramic products. Within the limits of printed material, the colors and aesthetics of the products correspond closely to those of illustrated products. Prospective customers are advised to inspect a sample of the tile before ordering and laying. At all points of time, the company liability is restricted to the purchase value of tiles.

Every effort has been made to ensure the accuracy of the information given. However, the company reserves the right to delete & change, any of the items, colors, sizes & technical specifications without any prior notice.

# TECHNICAL SPECIFICATIONS

## Cool Tile (Paver) from Sikandarabad

Packing Details			
Size	No. of Tiles Per Carton	Covered Area Per Carton	
( In mm. )		( In Sq. Mtr. )	( In Sq. ft. )
300X300 (Cool Tile)	10	0.9	9.69

Characteristics	Test Method	Requirement as per IS 15622:2017 0.08<E≤3 (Group B Ib)		OBL Value
Dimension & Surface Quality				
Deviation in Length & Width	IS 13630 (Part 1)	± 0.4 %	± 0.1 %	± 0.1 %
Deviation in Thickness		± 5.0 %		± 4.0 %
Straightness of Sides		± 0.3 %	± 0.1 %	± 0.1 %
Rectangularity		± 0.3 %	± 0.1 %	± 0.1 %
Surface Flatness		±0.5%		± 0.2 % 😊😊
Surface Quality		Min. 95% of the tiles shall be free from visible defects that would impair the appearance of a major area of the tile		Conform
Physical Properties				
Water Absorption %	IS 13630 (Part 2)	Avg 0.08<E≤3%, Individual 3.3 % Max		Max 2% 😊
Modulus of Rupture in [N/mm <sup>2</sup> ]	IS 13630 (Part 6)	Avg 30, Individual 27 Min		Min 36 N/nm <sup>2</sup> 😊😊
Breaking Strength in N	IS 13630 (Part 6)	700 Min for thickness <7.5 MM, 1100 Min for thickness ≥ 7.5 MM		Min 1600 N 😊😊
Moisture Expansion	IS 13630 (Part 3)	0.02 Max		Conform
Scratch Hardness (Moh's Scale)	IS 13630 (Part 13)	5 Min		Min 6 😊
Resistance to Surface abrasion of glaze tiles Class I to V (Applicable for floor applications only)	IS 13630 (Part 11)	Class II Min		Class III to V (Depending on surface)
Linear thermal expansion Co-efficient	IS 13630 (Part 4)	7×10 <sup>-5</sup> , Max		Conform
Thermal Shock Resistance	IS 13630 (Part 5)	10 Cycles, Min		Conform
Crazing Resistance	IS 13630 (Part 9)	4 Cycles at 7.5 Bar, Min		Conform
Impact Resistance	IS 13630 (Part 14)	0.55, Min		Min 0.60
Bulk Density, in g/cc	IS 13630 (Part 2)	2.0, Min		2.2 Min
Frost Resistance	IS 13630 (Part 10)	Requires if agreed to between manufacturer and purchaser		Passes
Chemical Properties				
Resistance to staining of Glazed Tiles	IS 13630 (Part 8)	Class I Min		Min Class I
Resistance to Household Chemicals		Class AA, Min		Min Class AA
Resistance to acids and alkalis (Except HF)		Require If Agreed		Min Class AA

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# TECHNICAL SPECIFICATIONS

## Cool Tile (Paver) from Hoskote

Packing Details			
Size	No. of Tiles Per Carton	Covered Area Per Carton	
( In mm. )		( In Sq. Mtr. )	( In Sq. ft. )
300X300 (Cool Tile)	10	0.9	9.68

As per ISO 13006:2012 (Group B Ia) and as IS 15627:2017 (Group B Ib)				
Characteristics	Test Method	Required as per IS 15622:2017 0.08 < E ≤ 3 % ( Group B b		OBL Value
Dimension & Surface Quality		Unrectified	Rectified	
Deviation in Length & Width	IS 13630 (Part 1):2006	± 0.4 %	± 0.1 %	± 0.10 %
Deviation in Thickness		± 5.0 %		± 4.0 %
Straightness of Sides		± 0.3 %	± 0.1 %	± 0.10 %
Rectangularity		± 0.3 %	± 0.1 %	± 0.10 %
Surface Flatness		±0.5%		± 0.2 % 😊😊
Surface Quality		Min. 95 % tiles should be free from visible defects		Conform
Physical Properties				
Water Absorption %	IS 13630 (Part 2):2006	Avg 0.08<E≤3%, Individual 3.3 % Max		Av < 3% 😊😊
Modulus of Rupture in [N/mm²]	IS 13630 (Part 6):2006	Avg 30, Individual 27 Min		> 35 😊😊
Breaking Strength in N	IS 13630 (Part 6):2006	700 Min for thickness <7.5 MM, 1100 Min for thickness ≥ 7.5 MM		1500 Min 😊😊
Moisture Expansion	IS 13630 (Part 3):2006	0.02 Max		Conforms
Scratch Hardness (Moh's Scale)	IS 13630 (Part 13):2006	5 Min		5-8 depends on surface 😊
Resistance to Surface abrasion of glaze tiles Class I to V (Applicable for floor applications only)	IS 13630 (Part 11):2006	Class II Min		3-5 as per design/surface
Linear thermal expansion Co-efficient	IS 13630 (Part 4):2006	7x10 <sup>-4</sup> , Max		Conforms
Thermal Shock Resistance	IS 13630 (Part 5):2006	10 Cycles, Min		Passed
Crazing Resistance	IS 13630 (Part 9):2006	4 Cycles at 7.5 Bar, Min		Passed
Impact Resistance	IS 13630 (Part 14):2006	0.55, Min		Conforms
Frost Resistance	IS 13630 (Part 10):2006	Required		Resistance
Chemical Properties				
Resistance to staining of Glazed Tiles	IS 13630 (Part 8):2006	Class I Min		Min. Class-1
Resistance to Household Chemicals		Class AA, Min		Min. Class-AA
Resistance to acids and alkalis (Except HF)		Require If Agreed		Required, if agreed

NOTE: Certain amount of Size and Shade variation is inherent in all ceramic products. Within the limits of printed material, the colors and aesthetics of the products correspond closely to those of illustrated products. Prospective customers are advised to inspect a sample of the tile before ordering and laying. At all points of time, the company liability is restricted to the purchase value of tiles.

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## Making Tile Selection Easier



Find tiles similar to a reference image



Tiles selected by you in your room



Visualise selected tiles & get a quote



Share layout for a personalised render\*

[www.orientbell.com](http://www.orientbell.com)

### CORPORATE OFFICE:

Iris House, 16 Business Centre,  
Nangal Raya, New Delhi-110046, India  
Tel: +91-11-47119100, Fax: +91 -11-2852 1273

### REGISTERED OFFICE:

8 Industrial Area, Sikandrabad-203 205 (UP), India  
Tel: +91-5735-222-203 / 24, +91-8191004575/ 76  
Fax: +91 -5735 222 642

### CUSTOMER CARE:

[customercare@orientbell.com](mailto:customercare@orientbell.com)  
Missed Call : 87507 11111  
Whatsapp : 87507 33333

CIN: L14101UP1977PLC021546

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