

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





#### ULR-TC702023000000023F

Report No: CRDF/RPT/SRI/726 Report Date: 20th March 2023

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 24th February 2023 are as under:

1. Customer Information

i. Name of the Organization : M/s. Master Builders Solutions India Private Limited

ii. Contact Person : Anand Gharat

iii. Address : Master Builders Technology Centre,

D-126, Shiranvane MIDC, Nerul Navi Mumbai, Maharashtra - 400706

iv. Phone Numbers : 7506291340v. Fax Number : Not Applicable

vi. Email : anand.gharat@mbcc-group.com

## 2. Photometry Testing

iv.

# 2.1 Glazing Materials

#### 2.1.1. Sample Details

i. Sample Identification Number : SRI/03/23/1727

ii. Date of Test : 17th March 2023

iii. Name and any other pertinent

Thickness of the specimen

Identification of the material : MasterSeal 379

(As declared by customer)

v. Thickness as tested : Not Applicable

vi. Condition of Sample when received : Satisfactory
vii. Method and Environment used for : Not Applicable

Conditioning (if used)

viii. Condition used for laboratory soiling : Not Applicable And weathering (if used)

ix. Description of soiling mixture
(If laboratory soiling and : Not Applicable
Weathering used)

x. Instrument used : Spectrophotometer with integrating sphere with reference material

Spectralone & FTIR with IR specular reflection set.

: 4.5mm (4mm Cement Board + 0.5mm Coating)

xi. Environmental Conditions maintained : Temperature 24.9° C and Humidity 35% Rh

during the test

xii. Boundary Conditions (Test Method) : ASTM E 1980, BS EN 12898, EN 673 and EN 410

N.D.B.L.Com.C. Analyzed By: Nikhil Bhesaniya Lab. Technician Reviewed By: Yashkumar Shukla Technical Director



Authorized By: Yashkumar Shukla Technical Director

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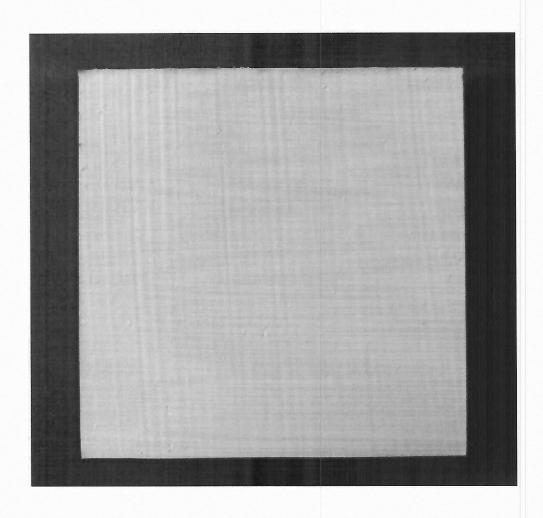


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3. Photograph of the specimen.

Report Date: 20th March 2023



N D. Bhesers

Analyzed By:
Nikhil Bhesaniya
Lab. Technician

keviewed By: Yashkumar Shukla Technical Director



Authorized By: Yashkumar Shukla Technical Director



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#### 4 Results of the measurement:

#### Solar Direct Reflectance

Sample name	Sample ID	Measurement 1	Measurement 2	Measurement 3	Average
MasterSeal 379	SRI/03/23/1727	0.7820	0.7816	0.7829	0.7822

#### **Emissivity**

Sample name	Sample ID	Measurement 1	Measurement 2	Measurement 3	Average
MasterSeal 379	SRI/03/23/1727	0.924	0.920	0.922	0.922

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

Sample name	Sample ID	Solar Reflectance Index (SRI)			
MasterSeal 379	SRI/03/23/1727	Low Wind(h <sub>c</sub> =5 W m <sup>-2</sup> K <sup>-1</sup> )	Medium Wind(h <sub>c</sub> =12 W m <sup>-2</sup> K <sup>-1</sup> )	High Wind(h <sub>c</sub> =30 W m <sup>-2</sup> K <sup>-1</sup> )	
		98	98	98	

### Surface Temperature (Ts) under different wind conditions

Sample name	Sample ID	Surface Temperature (°C)			
MasterSeal 379	SRI/03/23/1727	Low Wind(h <sub>c</sub> =5 W m <sup>-2</sup> K <sup>-1</sup> )	Medium Wind(h <sub>c</sub> =12 W m <sup>-2</sup> K <sup>-1</sup> )	High Wind(h <sub>c</sub> =30 W m <sup>-2</sup> K <sup>-1</sup> )	
	SK1/03/23/11/21	50.4	45.4	41.2	

### Remark, if Any:

5 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.

M.D. Blueson Analyzed By: Nikhil Bhesaniya Lab. Technician Reviewed By: Yashkumar Shukla Technical Director



Authorized By: Yashkumar Shukla Technical Director

- Disclaimer:

  1. 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.
  - 2. 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.
  - 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 advertising media without written approval of Director, CEPT Research & Development Foundation.