

Shikkui Sora

Product Data Sheet

 For spraying application, depending on a spraying machine type, additional water may be needed.

1. Manufacturer

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2. Product Description

Shikkui Sora is a fine natural lime plaster designed for fast and versatile applications with a trowel, roller or spraying equipment. It comes in powder form and is composed primarily of hydrated lime, calcium carbonate, seaweed extracts and mineral fibers. The product is "aggregate friendly", which allows for further customization of the finish's texture and performance.

3. Features

- Natural mineral material
- Interior and exterior applications
- Odor free, zero-VOC, and non-toxic
- Naturally antibacterial, antiviral, and antifungal
- Antistatic and hypoallergenic
- Textured sprayer, roller or trowel application
- Excellent workability
- Aggregate-friendly
- Cradle to Cradle certified (Silver)

4. Packaging and Coverage

Shikkui Sora is packed in 20kg sacks as a dry premix.

Dookaga	Application	Coverage		Min Cure
Package	Thickness	m2	ft2	Time
20kg (44lb)	0.6mm	45	485	12 hours

5. Suitable Substrates

See Application Scheme for detailed explanations.

6. Colors

For tinting, please use manufacturer's liquid colorants that are best compatible with the product, UV resistant, alkali-resistance and VOC free.

For exterior applications use Topcoat SA as a water-repellent and anti-efflorescence protective coating.

7. Mixing Instructions

Always wear a dusk mask or respirator when mixing Shikkui. Please refer to SDS for details.

Mixing water instructions

- Mix the plaster, colorant and 90% of the below recommended amount of water at once. Use a high-speed mixer.
- Add the remaining 10% of water to reach a softer consistency suitable for application.

Recommended water amount

Package	Application		
rackage	Trowel	Sprayer / Roller	
20kg	14L	15L	
(44lb)	(3.7 gal)	(4 gal)	

8. Application Instructions

See Application Scheme for details on application steps.

General Guidelines:

- Ensure that the target substrate is clean, dry and stable. If necessary, perform a standard patching and joint treatment.
- Prime the substrate with Shikkui Primer to ensure proper water absorption control. Let it dry well
- Apply Interior Base in a first thin skim coat, working the material in all directions to achieve a strong bond. Let it dry for 5-15 min. Optionally apply another coat to level out the surface further. For the best flat and consistent Shikkui Sora finish effect, the base coat's surface should be consistently flat. Let it dry well. This may take at least a few hours depending upon site temperature and humidity.
- Apply Sora finish in the first thin skim coat, working the material in all directions to create the bond with the surface. Let it dry for 10-20 min until it visually loses moisture and is firm to touch. Pass over drying plaster in one direction with stainless or plastic trowel to achieve flat and smooth surface. Let it dry for another 5-15 min, then repeat the final touch. Drying time: approx. 12 hours.

Recommended spraying equipment:

- Texture sprayers
- Hopper gun sprayers

Notes:

- (a) The actual application depends on application method, optional aggregates and a desired surface texture/effect. The site temperature and humidity may influence the drying time. Please consult with the manufacturer or distributors about application for your particular project.
- (b) Shikkui is a natural material and if left in its natural state, will allow the substrate to breathe. If protection against high humidity is required, it can be mixed with 100% natural soybean oil and/or sprayed with a silicon-based agent after completely dry. See Application Scheme for details.

- (c) Most Shikkui plasters are relatively easy to apply, allow fast application, thin application layers and low material consumption. However, the specific techniques and timing are critical, therefore for applicators we highly recommend to attend at least one Shikkui workshop.
- (d) Use adequate tools to ensure high performance and workability.
- (e) Apply the materials at the temperature range 45 95F (5 $35^{\circ}C$).

9. Test Data

All tests were carried out by accredited testing laboratories in the United States.

9.1 Fire Resistance (ASTM E84)

The test was conducted in accordance with the International fire response standard <u>ASTM E84</u>, "Surface Burning Characteristics of Building Materials", also referred to as Steiner Tunnel Test.

Flame spread index	0
Smoke development index	0
Classification by ASTM E84	Class A

Class A corresponds to **Type I** in other codes.

9.2 VOC Content (ASTM D3960)

The test was carried out in accordance with <u>ASTM D3960</u>, "Determination of Volatile Organic Compound (VOC) Content of Paints and Related Coatings".

VOC		
Grams/Liter	Pounds/Gallon	
0.7	0.0	

The result implies a Zero-VOC material.

9.3 Shore D Hardness (ASTM D2240)

The hardness was determined in accordance with the procedures outlined in <u>ASTM D2240</u> "Rubber Property – Durometer Hardness".

Shore A Durometer	95-97
Shore D Durometer	61-62

9.4 Mold/Fungal Resistance (ASTM D3273/D3274)

Testing conducted in accordance with procedures outlined in <u>ASTM D3273</u> "Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber" and <u>ASTM D3274</u> "Evaluating Degree of Surface Disfigurement of Paint

Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation".

The coated test panels did not exhibit any fungal growth on the face or back of the test panels after 28-days of exposure (**ASTM Rating 10**).

10. Certifications



Shikkui Sora is certified with Cradle to Cradle at Silver level by McDonough Braungart Design Chemistry (MBDC).
More details on:
http://www.mbdc.com

11. Clean Up

Freshly mixed and still wet Shikkui Sora cleans up easily with water. If the material is left for a long time (days), it can only be removed by mechanical abrasion or scraping.

12. Maintenance

The product would require no additional maintenance if installed following proper and accepted procedures.

13. Limited Warranty

Manufacturer expressly warrants that all its products shall be of Manufacturer's standard quality and for a period of (2) two years from the date of the purchase, products will be reasonably free of defects in materials and workmanship according to the technical specifications of this building material as described in the technical data sheets. Manufacturer warrants its products to be fit for the ordinary purpose for which they are intended, provided that the products prior to the installation were stored and handled the manner recommended in manufacturer in the original package.

Manufacturer makes no other warranties, express or implied: there are no implied warranties including warranty of merchantability or fitness for a particular purpose.

Due to the variety of uses and applications of manufacturer's products, manufacturer does not make any warranties that can be attributed to external aspects related to improper application and craftsmanship, structural movements and cracking, stability of the substrate, problems caused by water penetrating underneath base coat (either due to structural issues or installation), structural cracking, acts of God and other external factors.

14. Storage

Powder: at least 2-3 years if stored under dry and cool conditions $(5 - 25^{\circ}\text{C})$ in the original package.

Last modified: 15 Jan 2019