



**1. Description**

**Shikkui Sora** is a natural lime plaster composed of hydrated lime, calcium carbonate, seaweed extracts, plant fiber and a special additive for workability control. The extra fine composition allows for spraying machine, trowel or roller applications. The most versatile and easy to apply finish among all Shikkui plasters.

**2. Features**

- Natural mineral material
- Sprayed, rolled or troweled application
- Excellent workability
- Interior and exterior applications
- Odor free, zero-VOC, and non-toxic
- Naturally antibacterial, antiviral, and antifungal
- Antistatic and hypoallergenic
- Up to 40% recycled rapidly renewable content
- Cradle to Cradle certified (Silver)

**3. Packaging and Coverage**

Shikkui Sora is packed in 20kg and 4kg sacks as a dry premix.

Package	Application Thickness	Coverage		Cure Time
		m2	sq ft	
44lb (20kg)	0.4mm	66	720	6 hours
	0.6mm	45	485	12 hours
8.8lb (4kg)	0.4mm	13	140	6 hours
	0.6mm	9	97	12 hours

**4. Suitable Substrates**

See Application Scheme for detailed explanations.

**5. Colors**

Color pigments are combined with the plaster at the point of mixing. For rich stable colors and simple mixing procedures we highly recommend the pre-mixed Shikkui Color compound. With our proprietary technology of color management, this colored compound allows up to 20% by weight of pigment. Both standard colors and color matching are available.

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

**6. Mixing Instructions**

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

**Water requirements**

Package	Trowel / Roller Application	Airless Sprayer Application
44lb (20kg)	4 gal (15L)	3.5 gal (13.5L)
8.8lb (4kg)	0.8 gal (3L)	0.7 gal (2.7L)

**Trowel/Roller Application:**

- Mix Shikkui Sora, the colored compound and 90% of the above 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.

**Airless Sprayer Application:**

- Mix Shikkui Sora, the colored compound and the above recommended amount of water at once. Use a high-speed mixer.
- Depending on a spraying machine type, additional water may be needed.

**7. Application Instructions**

See Application Scheme for details on application steps.

**General Guidelines:**

- Apply Shikkui Sealer onto clean and dry surface to ensure proper water absorption control. Let it dry well.
- If necessary, perform a standard joint treatment using base coat.
- Apply a base coat at thin layer, working the material in all directions to achieve a strong bond. Let it dry for 5-15 min, then flatten again. For a flat/smooth finish effect, the base coat's surface should be as flat as possible. Let it dry very well. This may take at least 2 hours depending upon site temperature and humidity.
- Apply the finish, working the material in all directions. Let it dry for 10-30 min until it is firm to touch. Pass over drying plaster in one direction with stainless or plastic trowel to achieve smooth or polished surface. Let it dry for another 5-15 min, then repeat the final touch. Cure time: 6-12 hours.

**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°C).

## 8. Test Data

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

### 8.1 Fire Resistance (ASTM E84)

The test was conducted in accordance with the International fire response standard ASTM E84, “*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	<b>Class A</b>

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

### 8.2 VOC Content (ASTM D3960)

The test was carried out in accordance with ASTM D3960, “*Determination of Volatile Organic Compound (VOC) Content of Paints and Related Coatings*”.

VOC	
Grams/Liter	Pounds/Gallon
0	0

The result implies a **Zero-VOC material**.

### 8.3 Shore D Hardness (ASTM D2240)

The hardness was determined in accordance with the procedures outlined in ASTM D2240 “*Rubber Property – Durometer Hardness*”.

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

### 8.4 Mold/Fungal Resistance (ASTM D3273/D3274)

Testing conducted in accordance with procedures outlined in ASTM D3273 “*Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber*” and ASTM D3274 “*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**).

## 9. 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>

## 10. Storage

Powder: 2-3 years if stored under dry and cool conditions (5 – 25°C) in the original package.

### Tagawa Sangyo Co., Ltd.

1924 Yugeta, Tagawa city, Fukuoka Pref.,  
826-0041 Japan  
T: +81-905-285-0855 | F: +81-947-44-8484  
[info@shikkui.com](mailto:info@shikkui.com) | <http://www.shikkui.com>

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