

*Natural
Pattern
Panel*

Rhino®



■ The Characteristics of *Urushi Natural Pattern Panel*

Urushi on Glass (transparent material)

Natural Pattern - only from genuine *Urushi*

- Natural pattern which enhances the quality of genuine *Urushi* lacquer
- Complete control of pattern sizes and directions
Reproduce the pattern by processing data of drying conditions.
- Designed on computer
- Surface expression varies according to the direction of light that *Urushi* absorbs

~ Creating Space that Transforms throughout the Day ~

Natural light changes throughout the day with the morning sun, the mid-day sun and the evening sun, thus giving different expression of *Urushi*. In addition, the day's weather alters the sunlight.



Light from behind



Light from front



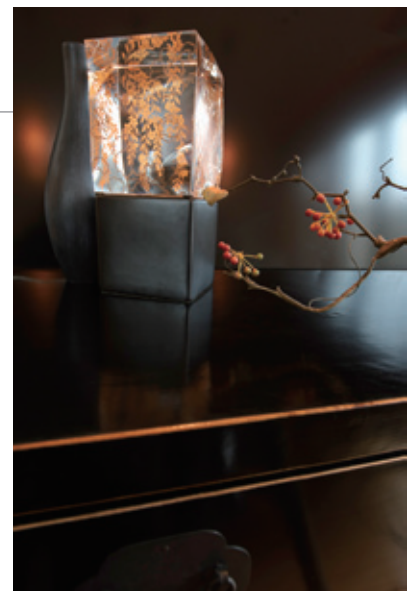
Light from both sides

Glass *Maki-e* (*Maki-e* on transparent material)

Characteristics of dimensional *Maki-e*

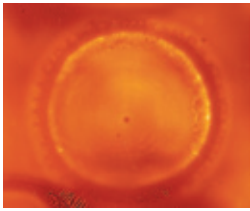
- Different designs on two or more sides
- *Maki-e* in a dimensional view
- Combined with light, *Maki-e* makes some fanciful surface

Urushi Natural Pattern Light Panel: patent pending
On February 26, 2009, project for "Development of products utilizing *Wajima* lacquering technique on base materials such as titanium and glass" was approved as the "Plan to Revitalize Regional Industry Resources" by METI (Ministry of Economy, Trade and Industry)



Natural Pattern

Ripple



The pattern created by *Urushi* repelling and spreading naturally.

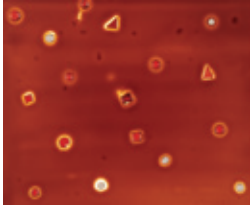
- Single Ripple made by one Ripple
- Over-layered Ripple made by group of Ripple

Round or oval patterns in sizes varying from min of 5cm to max of 25cm.

● Background *Urushi* color: Burgundy, Rosewood

Delivery term: 10 days

Sprinkle



The pattern created by sprinkling *Urushi* chips.

The color of chips clearly emerges through the light illuminated from the other side. The pattern can be over-layered in chip sizes from minimum of 7mm to maximum 20mm.

● *Urushi* chip is available in 7 colors: green, blue, vermilion, orange, black, white, clear

Background *Urushi* color: Burgundy, Amber, Rosewood

Delivery term: 10 days

Split



The pattern created by the pulling movement between *Urushi* and foil. It takes a month for the pattern to settle while drying.

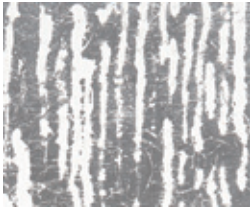
The splits can be placed from minimum 2mm to maximum 100mm apart. The pattern can be laid out on two or more glasses.

● Background *Urushi* color: Burgundy, Rosewood

Good for striped background of 2 colors

Delivery term: 60 days

Crystal



When foil is large, light is reflected from the glass surface.

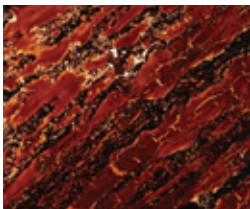
The light from behind goes through *Urushi* and turns it into Rosewood color.

The pattern can be laid out on two or more glasses.

● Background *Urushi* color: Burgundy, Rosewood, Amber

Delivery term: 14 days

Bark



The pattern which has the texture of tree bark.

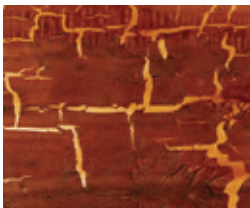
Can be laid out on two or more glasses

Direction of the pattern is flexible.

● Background *Urushi* color: Burgundy, Rosewood

Delivery term: 60 days

Crack



The pattern created by the cracking of *Urushi*. Adopted from traditional *Hibi-nuri* (crack lacquering) technique from *Edo* Period, the crack is made larger in size. Crack size is optional from minimum of 2mm to maximum of 100mm.

● Background *Urushi* color: Burgundy, Rosewood

Delivery term: 14 days

Urushi colors for the background

* Burgundy is uv-resistant.

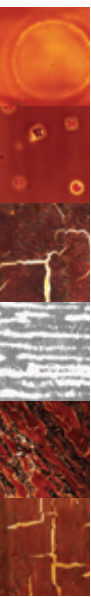
Burgundy



Rosewood



Amber



Artwork design

Natural *Urushi* creates unpredictable but fantastic patterns while drying. It is full of dynamic energy that you will never be tired of. These patterns are ready to be processed into design by our specialized architect.

■ 6 basic *Natural Patterns*

Ripple, Sprinkle, Crystal, Split, Crack, Bark

■ 3 basic background colors

Burgundy, Rosewood, Amber

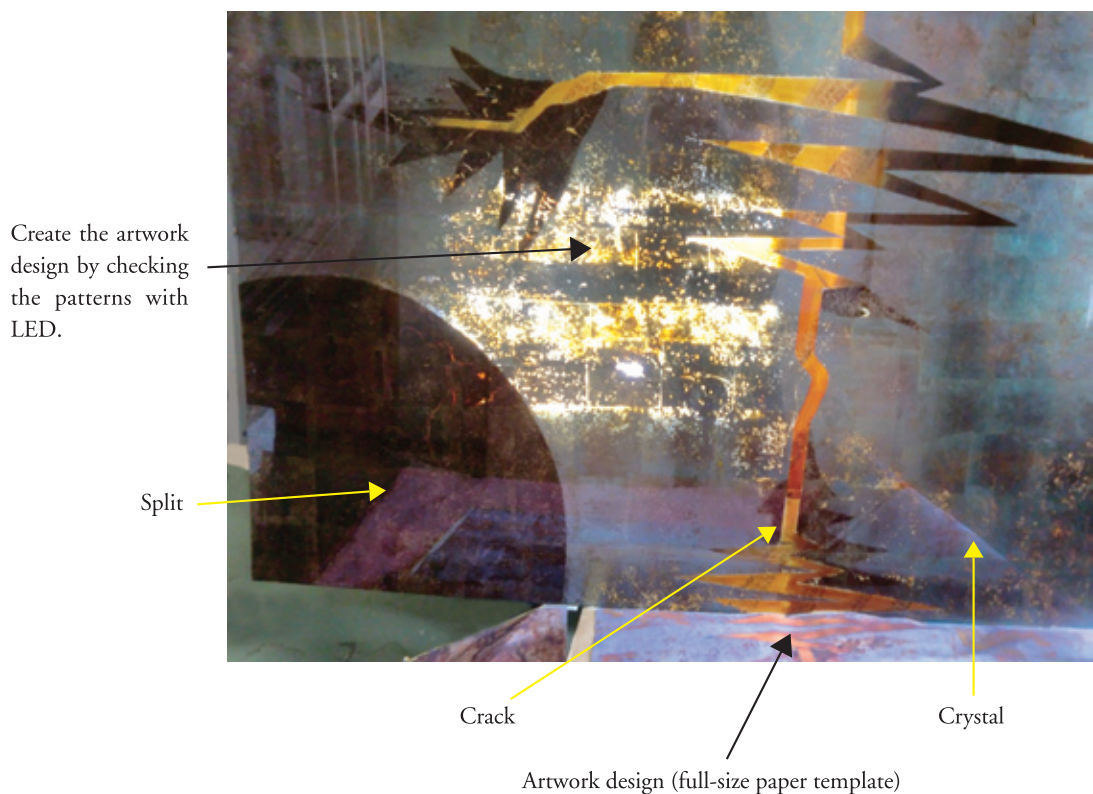
Crystal and Sprinkle can be made on 3 colors above.

For other patterns, only Burgundy and Rosewood are available.

■ Patterns that can be over-layered

Sprinkle + Ripple, Crystal + Ripple

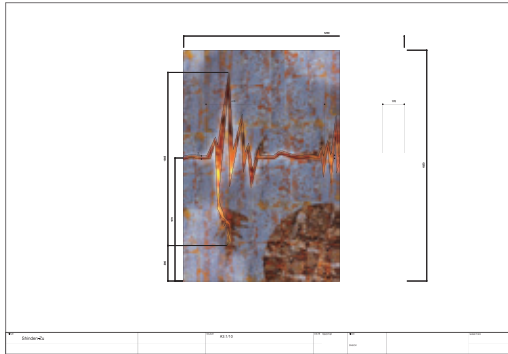
The other patterns are laid out in the artwork design.



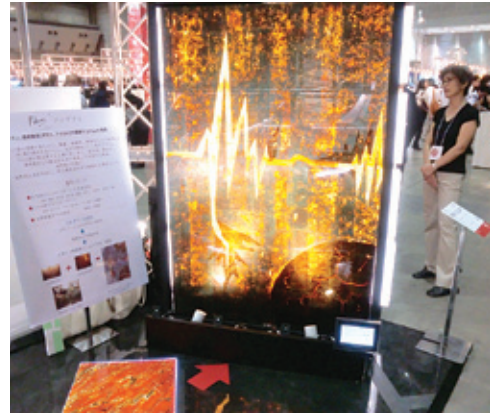
Designing *Urushi Natural Pattern* by computer Layout by architects to fit in your space

Design Example

Design Example ①

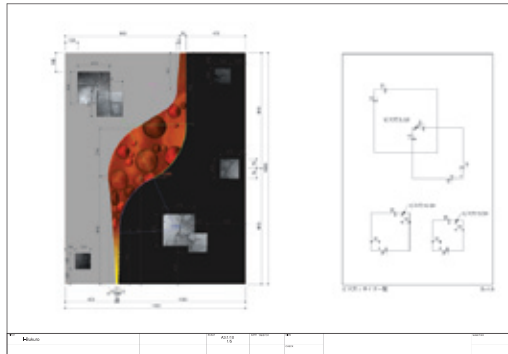


Design picture by Ms. Mitsuko Okabe



Finished work: Electrocardiogram of the Earth

Design Example ②



Design picture by Ms. Mitsuko Okabe



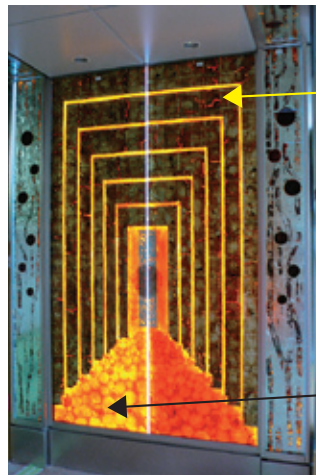
Finished work: Stomach of the Earth

Examples of *Natural Pattern* Usage

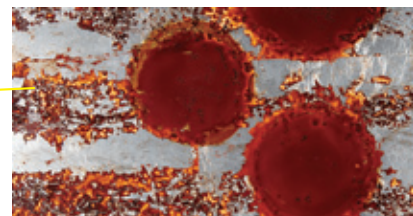
Various usages of Ripple



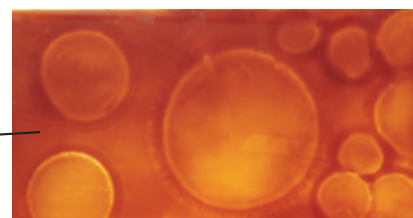
Bark + Ripple



Ripple + Crystal
Example of over-layered Ripple
Design by Ms. Moyo Kobayashi



Ripple + Crystal



Over-layered Ripple

■ Production Process and Q&A 1

● Glass Base Process

Q Should I bring the glass to be decorated?

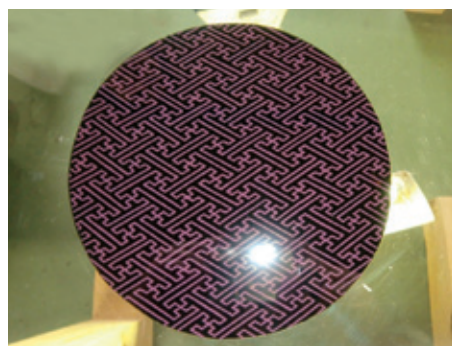
Answer In principle, the quote is cost for the lacquering process only, and we ask the customer to bring the glass. We understand that the thickness of the glass varies according to the customers' needs. If we are to prepare the glass, it will be quoted additionally.



● *Maki-e* Process of drawing picture with *Urushi* and sprinkling gold powder

Q Do you work on *Maki-e* first?

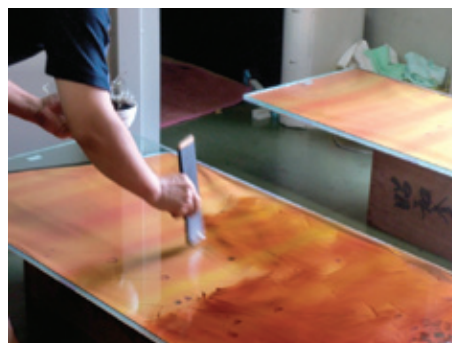
Answer For the traditional base material, *Maki-e* is applied on after the lacquering is done. However, as the glass panel is usually used as glass surface in front, working on *Maki-e* first is one of the characteristics of this process.



● Under-coating Process All by Hand

Q Why is the work done by hand?

Answer The main characteristic of glass panel is its transparency that allows the light to penetrate. With it, even the thickness of *Urushi* affects and shows the difference. Also, the hand-work gives the product warm, human touch that will impress people who see it.



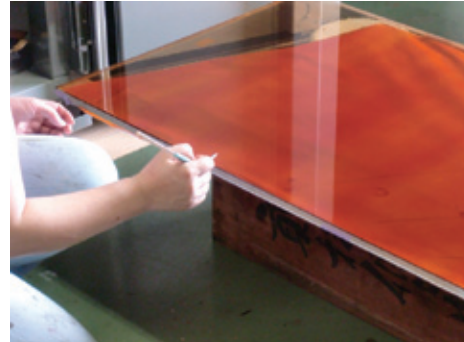
Production Process and Q&A 2

● *Fushi-age*

Clean any dust found on the lacquered surface.

The process is called "*Fushi-age*".

Maru-bushi, *Ito-bushi*...For the smooth communication among workers, even the dust is named for identification.



● One Design Laid out on Several Sheets

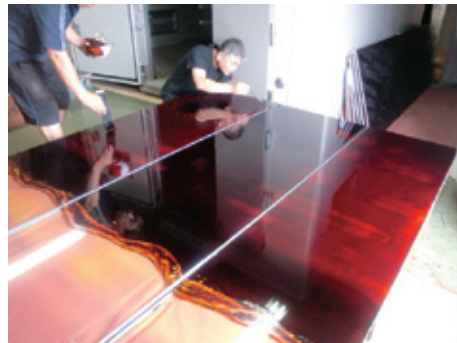
Some sheets of glasses can be connected for one big artwork design. By hand-work, any continuous patterns are possible to make.

Q

How many sheets can you connect?

Answer

Due to limited drying facilities, we can only connect up to 6 sheets (2470mm x 900mm) to apply *Urushi* at one time. If we apply *Urushi* on another day, the coloring might be a bit different, however, the sheet can still be connected. All six patterns can be connected.



Finished work

● Process of Placing Silver Foil

Apply *Urushi* lacquer and place silver or gold foil at the time of drying.

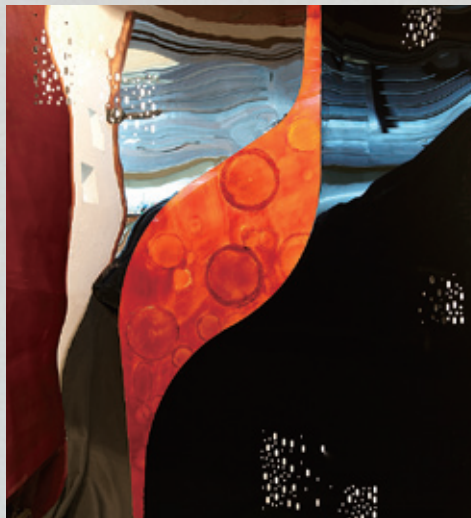
Q

Do you use *Urushi* to set the foil?

Answer

Nowadays, chemical adhesive is most often used to set foil. However, we use *Urushi* for that process. Applying *Urushi* brings various pattern and textures.





Traditionally, *Urushi* lacquer has been used to convey the essence of power, religion and family tradition. Now it conveys the technique cultivated through 10,000 years and commitment between man and nature.

**Think “Ethical Business”
in public facilities or private offices**

Manufacturing

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