

# Warlon Sheet

## Specifications

### Warlon Sheet Basic series

Item number	Thickness(mm)	Size(mm)
No.52	0.2	930×1850
		930×2150
		930×2450
		1240×2450
	0.3	930×1850
		930×2150
0.45	930×1850	
	930×2150	
No.2 No.95	0.2	930×1850
		930×2150
		930×2450
	0.3	930×1850
		930×2150
	0.45	930×1850
930×2150		
No.2-15G No.53	0.2	930×1850
		930×2150
	0.3	930×1850
0.45	930×1850	
No.1 / No.19 No.39 / No.61 No.82 / No.86 No.120	0.2	930×1850
		930×2150

### Warlon Sheet Artisan Washi paper series

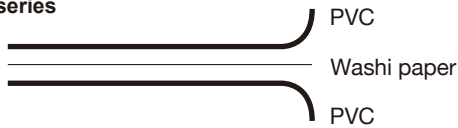
Item number	Thickness(mm)	Size(mm)
K-102 / K-104 K-105 / K-106 K-107 / K-108 K-109 / K-110 K-112 / K-114	0.3	930×606
		930×1850
		930×2150

# Warlon Sheet

## Specification

Warlon Sheet is a versatile PVC laminated Washi/shoji paper with superior durability and flame resistance (interior use only).

### Basic series



### Artisan Washi paper series



Note : Color may vary slightly by each lot because of using natural materials.

## Suggested Applications

Shoji sliding doors / fittings    Lighting covers    Room dividers and partitions    Sign/display decorations

## Cutting

Use a utility knife, scissors, a trimmer or a cutting machine.

## Tensile / Bursting Test

Testing method : Bursting strength (JIS P-8112) Tensile strength (JIS P-8113)

		Warlon Sheet		
		0.2mm	0.3mm	0.45mm
Bursting strength (kPa)	Average value	816	1210	1840
Tensile strength (kN/m)	Average value	9.8	15.4	25.9
	<b>Vertical</b>			
	<b>Horizontal</b>	8.5	13.3	23.3

Above are measured values and not guaranteed values.

# Warlon Sheet

## Note for application

1. **Do not bend or impact Warlon Sheet when taking it out from the box. Recommended that taking it out of the box while laying it down on a workbench or a table. In particular, be sure to take the 1230mm wide Warlon Sheet out with the box lying down. This is because it is difficult to bring it out of the box while it is standing up, which may result in white discoloration (the folded part looks white) and delamination (the detachment part looks white).**
2. If Warlon Sheet is curled, roll backwards to flatten. Install Warlon Sheet with a strong curl may result in peeling off.
3. Either side of Warlon Sheet can be attached. It can be over lapped, too.
4. **Use Warlon Double Sided Adhesive Tape for 0.2mm and 0.3mm thick Warlon Sheet. Woodworking glue, starch glue or conventional double sided tape will not adhere properly.**
5. **Warlon Sheet expands and contracts repeatedly according to the temperature changes. (Warlon Sheet with a length of 1000 mm expands and contracts by approximately 0.8 mm with a temperature change of 10 degrees Celsius. If the fittings have fewer frames/lattices (or wide spacing between lattices), the sagging of the sheet is more likely to be visible. Install it where the temperature is above 20 degrees Celsius if possible. If installed in a cold environment during the winter months, the sagging will increase in the summer months. Do not use Warlon Sheet in places where the ambient temperature can reach 60 degrees Celsius.**
6. Attaching 0.45mm thick sheet by double sided adhesive tape is not recommended due to risk of peeling off or warping of thin wood lattice. Use slot type frames. 0.2mm and 0.3mm thick sheet can be attached to thicker wood lattices, but avoid attaching to thin lattices such as “slide-up shoji.”
7. Water from condensation can seep in from edges of Warlon Sheet and cause staining of the Washi paper inside.
8. Under some circumstances, it may cause reverberation.

**Warlon Sheet is made of Washi/shoji paper laminated with PVC from both sides. When handling it, be careful not to bend, hit the corners, or impact it, since white discoloration (the bended part looks white) and delamination (the detachment part looks white) will occur.**

## Installation instruction of Warlon Sheet using Warlon Double Sided Adhesive Tape

Warlon Double Sided Adhesive Tape is exclusively designed to attach Warlon Sheet to shoji sliding door nad fittings. It has excellent heat resistance and adhesion. In addition, it can be installed immediately and beautifully after attachment.

**Double sided adhesive tape by other brand may result in peeling of Warlon Sheet, due to less heat-resistance or adhesiveness, so that please use Warlon Double Sided Adhesive Tape every time.**

### ● Shoji sliding doors with flush frame (or no ledge)

For flush frame (no ledge), pre-cutting of Warlon Sheet is not necessary.

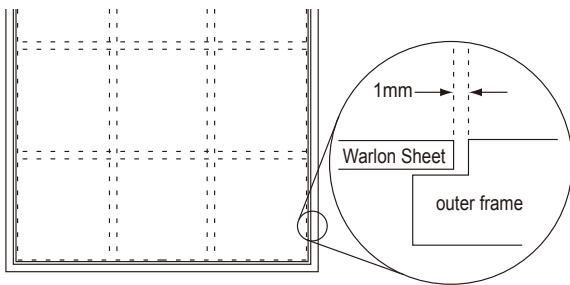
1. Apply tape on all vertical frames and lattices, and remove backings.
2. Apply tape on all horizontal pieces, and remove backings.
3. Place the Warlon Sheet on the shoji sliding doors without sagging and press down firmly on adhesive surfaces.
4. Cut excess Warlon Sheet off.

# Warlon Sheet

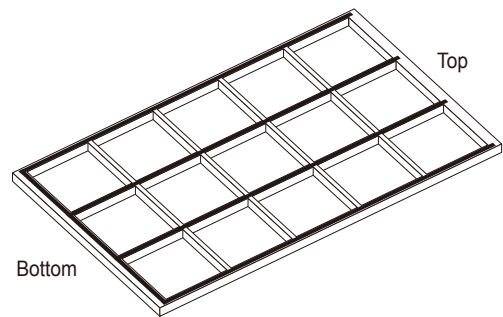
## How to attach Warlon Sheet

### • Shoji sliding door with deep ledges

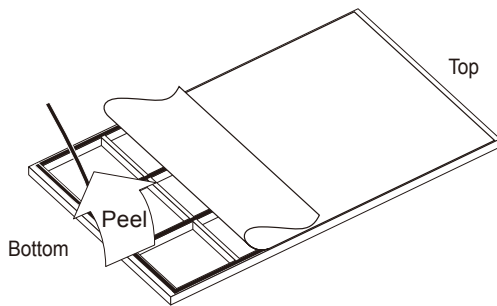
- 1** Cut Warlon Sheet 1mm shorter than the frame's ledge size, making a clearance for expansion.



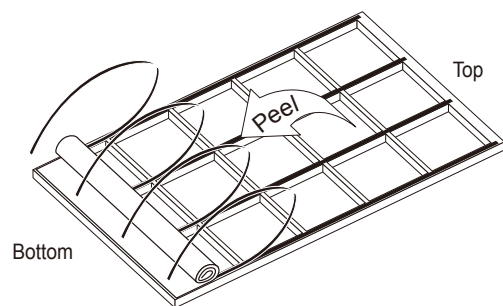
- 2** Apply Warlon double sided adhesive tape on horizontal frame at the bottom, and on all vertical frames and lattices. Do not peel backings yet.



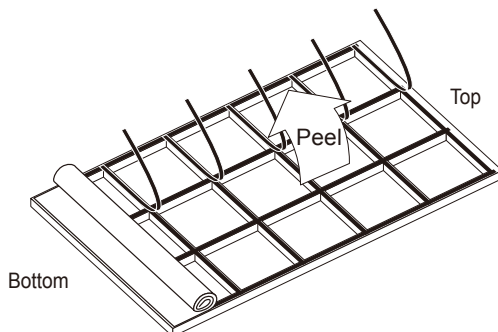
- 3** Lay pre-cut Warlon Sheet over the shoji sliding door and position it. Peel backing off from the bottom frame only. Only one horizontal frame is attached at this point.



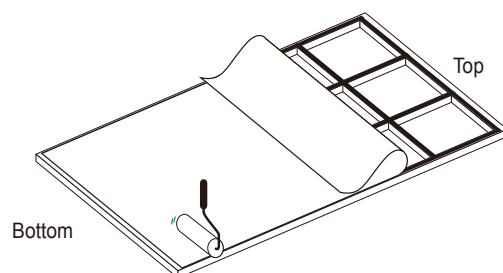
- 4** Roll up Warlon Sheet with one side attached. Peel backings off from vertical frames and lattices.



- 5** Apply tape on all horizontal lattices and the top frame, and then remove backings.



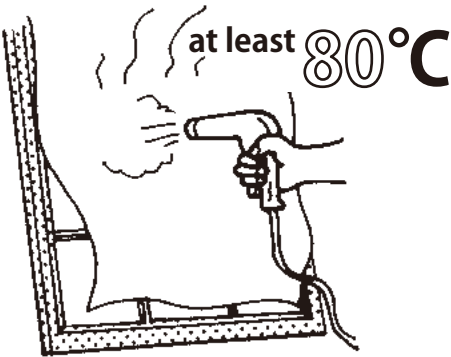
- 6** Slowly unroll Warlon Sheet while smoothing it out flat. Press firmly over adhesive surface with fingertips or a roller.



# Warlon Sheet

## How to remove Warlon Sheet attached with Warlon Double Sided Adhesive Tape

**1** Warm taped area of Warlon Sheet to 80 to 90 degrees Celsius using a hair dryer, an iron, or a heat gun. Pull Warlon Sheet slowly as not to damage the wood.



at least 80°C

**2** Tapes on wood need to be cooled before removing. After cooled, slowly pull tapes upwards. Making sure not to go against the grain of the wood.



Peel

## Note for installation with Warlon Double Sided Adhesive Tape

1. Make sure the workplace is well ventilated.
2. Use only after frames/lattices have dried completely, as adhesion will not be good when they are wet.
3. If frames/lattices is not smooth, use sandpaper to smooth bonding surfaces.
4. In order to prevent the Warlon double-sided adhesive tape from sticking out after applying the Warlon Sheet, apply the tape along the inside of frames/lattices when applying it to the periphery (frame ledges).
5. **After applying the Warlon Sheet, press down firmly on the adhesive surface. Inadequate crimping or low ambient temperatures during installation will cause peeling.** The adhesive strength of the double sided adhesive tape decreases when the ambient temperature falls below 10 degrees Celsius. Therefore, apply the tape in a warm environment. Place the shoji sliding door in a warm environment for a while after application for maintaining sufficient adhesion of the tape.

Please watch the video "How to apply Warlon Sheet" on You Tube Warlon Channel.

<https://youtu.be/bDwX8eie6nE>

# Warlon Sheet

## UV block rate / Light transmittance

Item number	Thickness(mm)	Light transmittance(%)	UV block rate(%)
Standard			
No.2	0.2	56	97
	0.3	51	98
	0.45	50	99
No.2-15G	0.2	66	95
	0.3	66	97
	0.45	64	98
No.52	0.2	41	99
	0.3	40	99
	0.45	38	99
No.53	0.2	55	97
	0.3	53	98
	0.45	53	98
No.95	0.2	68	91
	0.3	66	92
	0.45	68	93
No.1	0.2	65	95
No.19	0.2	66	95
No.39	0.2	61	95
No.61	0.2	61	96
No.82	0.2	39	98
No.86	0.2	67	95
No.120	0.2	64	95

### Artisan washi collection

K-102	0.3	48	98
K-104	0.3	* 43 - 52	98
K-105	0.3	57	97
K-106	0.3	* 47 - 55	98
K-107	0.3	* 23 - 31	99
K-108	0.3	* 44 - 62	98
K-109	0.3	* 40 - 50	98
K-110	0.3	* 44 - 52	99
K-112	0.3	39	99
K-114	0.3	* 43 - 51	98

※ Results vary slightly by position of measurement

Translucency testing method:

JIS K-7361-1(Test results are for reference only. Results vary slightly by position of measurement.)

UV block rate testing method:

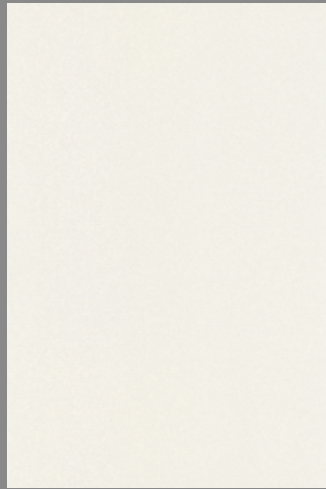
Standard testing method for UV block rate (Japan Synthetic Fiber association)

# Warlon Sheet

## Basic series



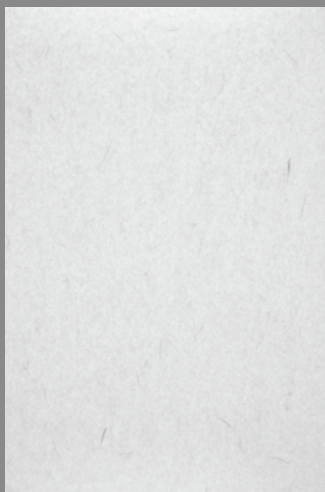
[ No.39 ]



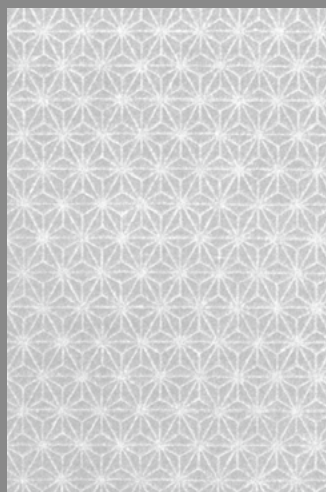
[ No.61 ]



[ No.1 ]



[ No.2 ]



[ No.19 ]



[ No.86 ]

The entire pattern area may look different and may differ from the actual color, because the pattern samples on this page are part of the pattern area.

# Warlon Sheet

Artisan Washi paper series



[ No.95 ]



[ No.120 ]



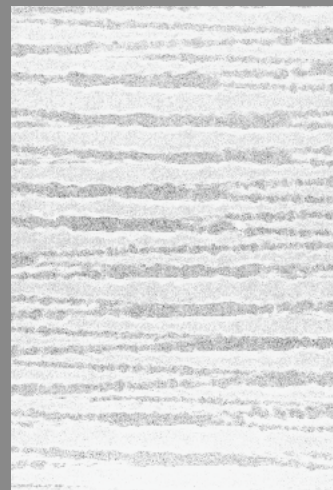
[ K-105 ]



[ K-106 ]



[ K-107 ]



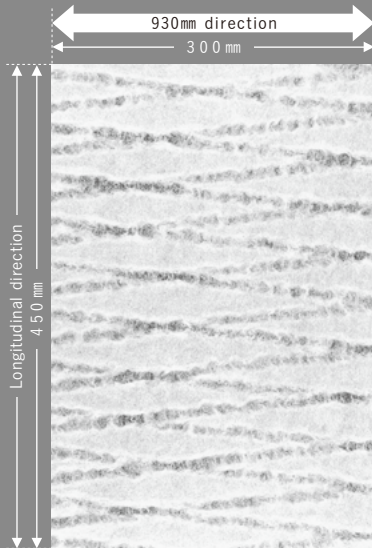
[ K-108 ]

The entire pattern area may look different and may differ from the actual color, because the pattern samples on this page are part of the pattern area.



# Warlon Sheet

## Artisan Washi paper series



[ K-109 ]



[ K-110 ]



[ K-104 ]



[ K-114 ]



[ K-102 ]



[ K-112 ]

The entire pattern area may look different and may differ from the actual color, because the pattern samples on this page are part of the pattern area.