

アクリワ-ロン®

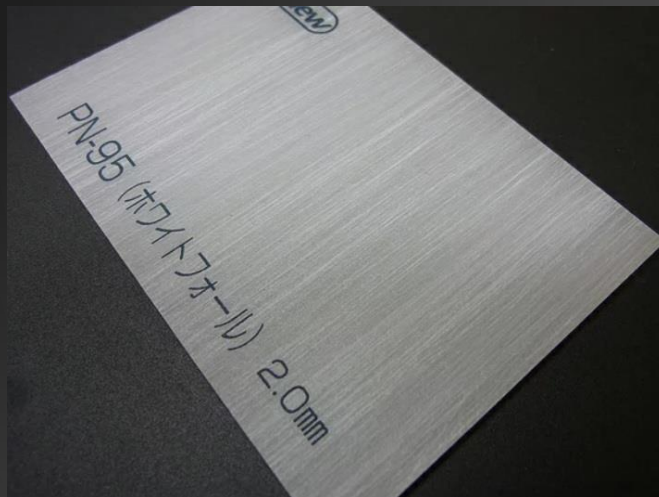
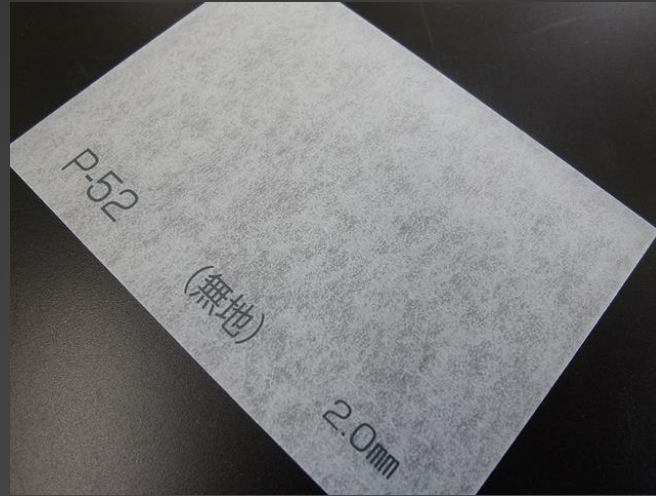


ARCYLIC WARLON

Acry Warlon faithfully recreates the design of the natural materials such as Washi paper while creating a softly lit space.

It is a versatile decorative acrylic resin plate with superior light resistance and workability.

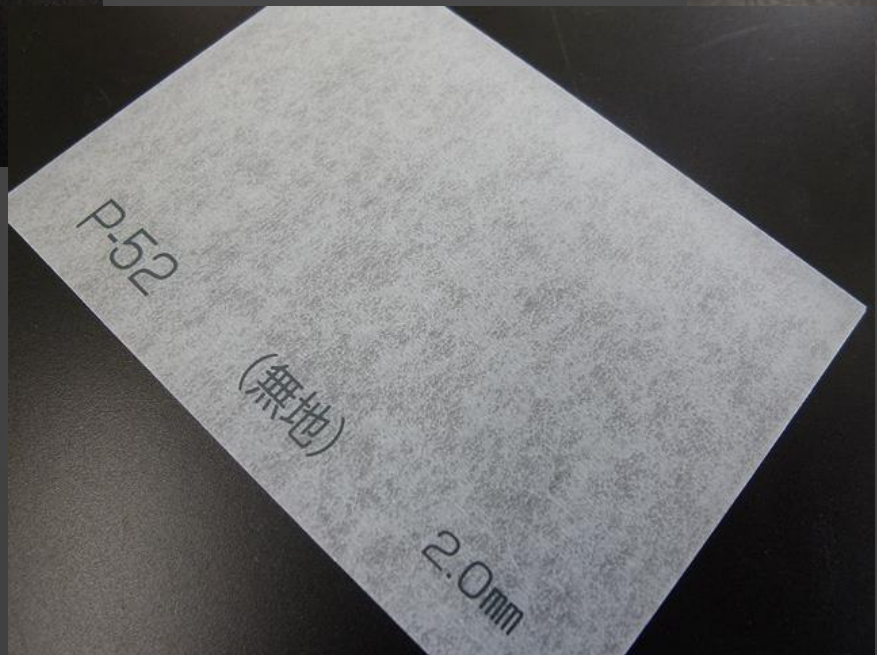
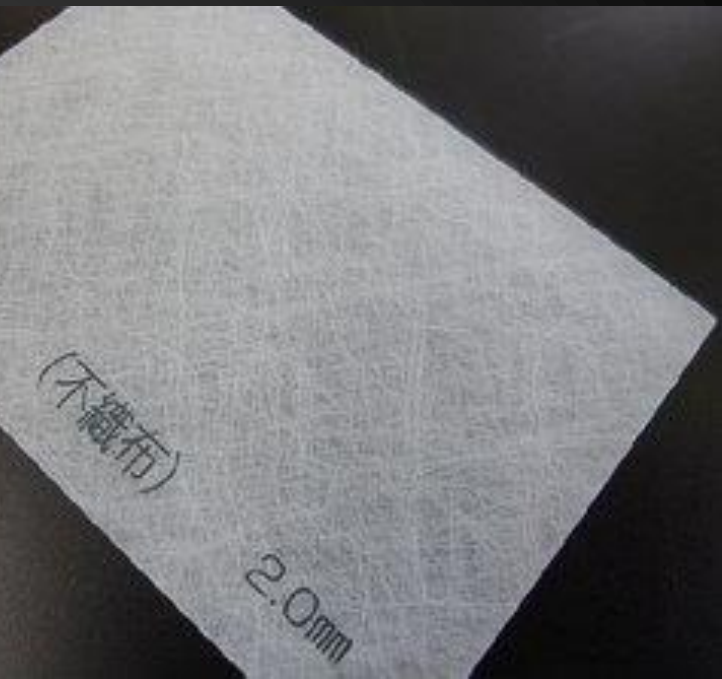
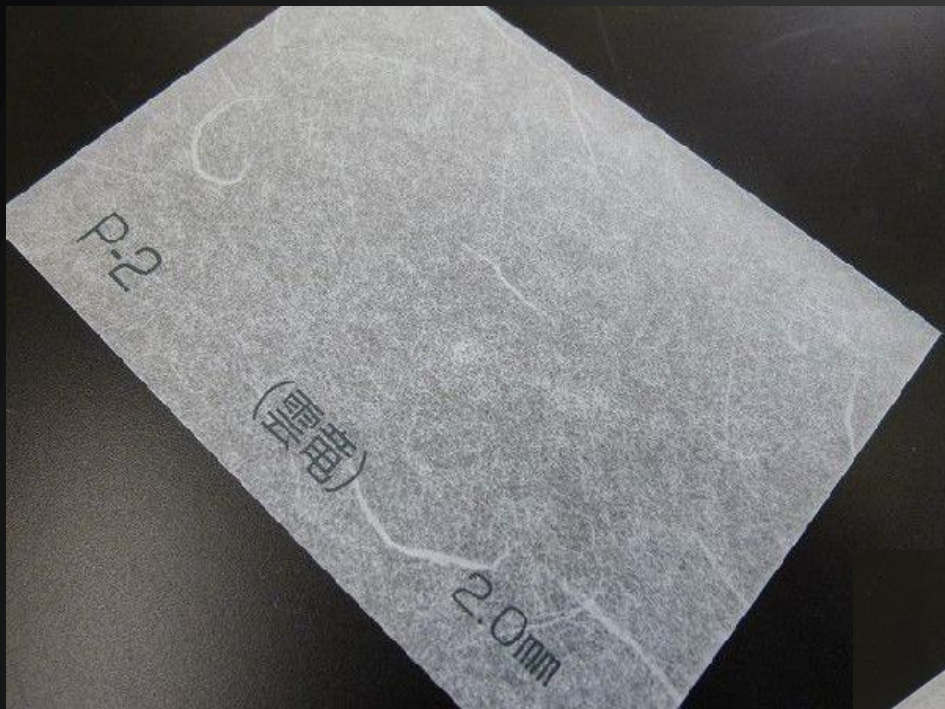
和紙等の天然素材の意匠を忠実に再現し、
耐光性や加工性にも優れた多目的にご利用頂ける
アクリル装飾樹脂板



SIZE VARIATION : 910 x 1820mm / 1100 x 1360mm / 1000 x 2000mm

THICKNESS : 1.0mm / 1.5mm / 2.0mm / 3.0mm / 5.0mm





SIZE VARIATION : 910 x 1820mm / 1100 x 1360mm / 1000 x 2000mm

THICKNESS : 1.0mm / 1.5mm / 2.0mm / 3.0mm / 5.0mm



Portrays the original beauty of Washi paper and creates soft-lit spaces.

Beautiful design

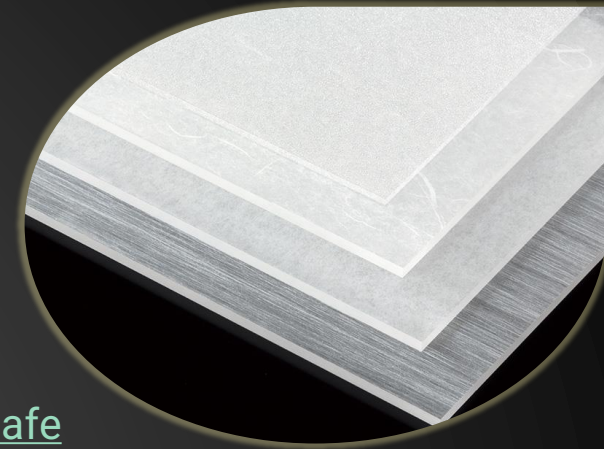
Portrays the unaltered feel and texture of Washi paper and gauze in addition to creating soft-lit spaces. PN model number products use a high light-transmitting milky white color as the base, allowing for use in settings where a high-degree of whiteness and prevention of glare from light sources are required.

Moldable

Uses acrylic print film, making thermoforming and other types of molding possible just like typical acrylic resin sheets. (Please avoid thermoforming of 1.0mm-thick Acry Warlon.)

Easy upkeep

Washable with water and wiping with a damp cloth for simple cleaning.



Lightweight and safe

At least half the weight of glass, and safe with durability and difficulty of breakage.

Superior light and water resistance

Acrylic material offers incredible light and water resistance.



Light resistance



Hard to break



Washable



Moldability



Where to use

- Shoji sliding doors and fittings
- Lighting Diffusers

- Room dividers and partitions
- Sign/display decorations

APPLICATION ARCYLIC WARLON

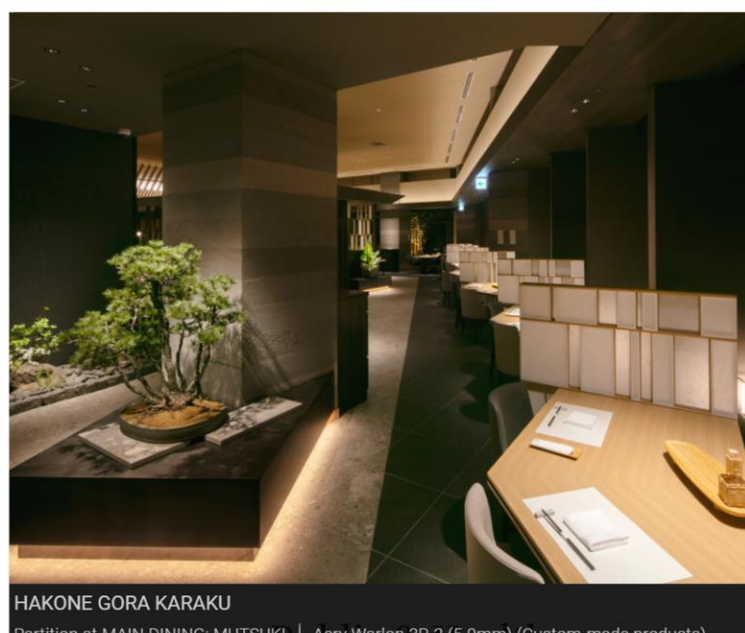




アクリワロン P-2 (2.0mm)
 ACRY WARLON
 CODE : P-2

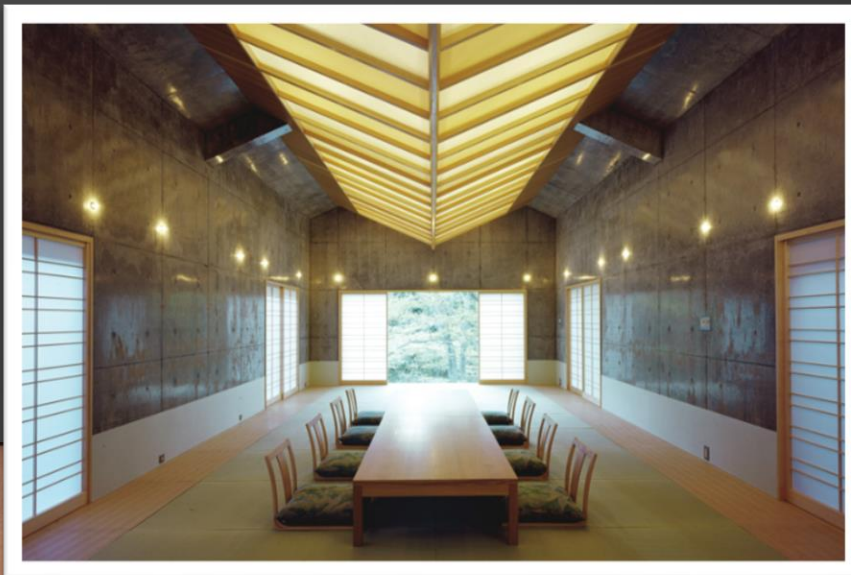


アクリワロン P-52 (2.0mm)
 ACRY WARLON
 CODE : P-52



HAKONE GORA KARAKU
 Partition at MAIN DINING - MITSUKI | Acry Warlon 3P-2 (5.0mm) (Custom-made products)

ACRY WARLON
 Thickness : 5.0mm



アクリワロン P-80 (3.0mm)
 ACRY WARLON
 CODE : P-80

APPLICATION ACRYLIC WARLON





アクリワロンPN-2 雲竜
ACRY WARLON
CODE : PN-2



アクリワロンPN-2 雲竜
ACRY WARLON
CODE : PN-2

APPLICATION ARCYLIC WARLON





アクリワロン P-2 (2.0mm)
 ACRY WARLON
 CODE : P-2



アクリワロン P-420 (2.0mm)
 ACRY WARLON
 CODE : P-420



アクリワロン P-80 (5.0mm)
 ACRY WARLON
 CODE : P-80



アクリワロン P-2 (2.0mm)
 ACRY WARLON
 CODE : P-2



APPLICATION ARCYLIC WARLON





アクリワロン P-2 (1.0mm、3.0mm)
ACRY WARLON
CODE : PN-2



アクリワロン
P-90 (1.0mm)
ACRY WARLON
CODE : P-90



アクリワロン
P-90 (1.0mm)
ACRY WARLON
CODE : P-90

ARCYLIC WARLON

APPLICATION ARCYLIC WARLON



Acry Warlon

Specifications

Printed Acrylic
< P / PN >

Printed film
Acrylic sheet

Acry Warlon is made of thin printed acrylic film layered on acrylic sheet. Can be heated to form custom shapes like other acrylic sheet. Excellent material with water and light resistance.

Do not use ecru color patterns (P-80 • P-81 • P-85 • PN-80 • PN-81) outside, as the color may fade under UV rays.

Suggested Applications

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

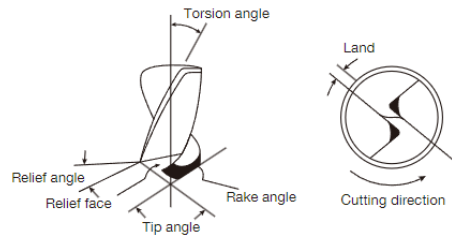
Drilling

Use a power drill or a boring machine.

Standard drill bit shape and guidelines

Tip angle	90 - 140°
Rake angle	0°
Relief angle	15 - 20°
Torsion angle	Large
RPM	1000 - 2000RPM
Feeding speed	50 - 60 mm per minute

Drill bit shape



Cutting

Use panel saw, circular saw, band saw or jig saw.

Panel saw/circular saw guidelines

Saw diameter	255 - 305m/m
Saw blade thickness	1.5 - 2.5m/m
Number of teeth	100 -120
Rake angle	0 - 1°
Relief angle	20 - 40°
Set angle	2 - 3°
RPM	3000 - 4000 rpm
Feeding speed	3 - 5 m per minute

Band saw guidelines

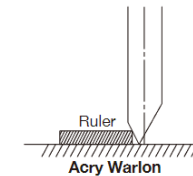
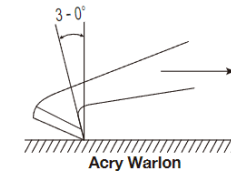
Saw width	3 - 10 m/m
Pitch	10 - 20 per inch
Saw blade thickness	0.7 - 0.9 m/m
Saw speed	500 - 1000 m per minute
Feeding speed	2 - 5 m per minute

Jig saw guidelines

Saw teeth	#1, #2, #3
Saw speed	15 - 30m per minute
Feeding speed	0.5 - 1.0 m per minute

Scoring

When cutting straight lines in small quantity, scoring method can be used. Score 1/3 of acrylic's thickness with a sharp blade. Hold acrylic with scored side up over a straight edge on a table, and press down until it snaps.

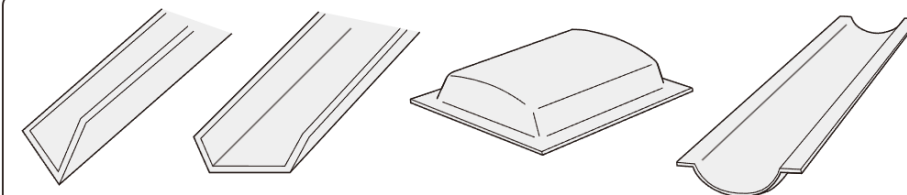


Adhering

1. Either side of Printed Acrylic (P/PN) products can be glued to other acrylic resin using acrylic adhesive. Note that adhesive may affect matting surface finish.

Forming/Bending

Note : Acry Warlon can be formed custom shapes by heat molding or heating with a bar heater. However, surface finish may be affected by processing conditions (temperature, shape, etc.). Form/bend at approximately 130 degrees Celsius (Acrylic's surface temperature). Do not heat-mold or thermally bend 1.0 mm thick of Acry Warlon.



*Please ask a plastic fabricator for heat forming / bending.

Note for application

1. Acry Warlon has a printed film on one side, so there is a front and back side.
2. Do not glue Acry Warlon to door frame/lattice. May cause warping/detaching. Use slot type frame.
3. For attaching Acry Warlon to aluminum door frame/panel, bead for resin is recommended.
4. Acry Warlon may start deforming, if temperature reaches 70 degrees Celsius.
5. When used as a room divider and the temperature varies significantly from one side to the other, warping/sagging of Acry Warlon may occur.
6. Make frame/lattice span appropriate in order to avoid warping/sagging of Acry Warlon, especially for a large piece.
7. Expansion and contraction may cause gaps when used on a continuous, long ceiling light box. Adding frames or lattices to the joints may be necessary.

Dimensional change of Acry Warlon as a result of usage environment

Expansion and contraction due to temperature change

Acry Warlon expands at higher temperatures and contracts at lower temperatures. Acry Warlon with a length of 1000 mm expands and contracts by approximately 0.8 mm with a temperature change of 10 degrees Celsius. If the temperature difference between winter and summer is assumed to be 40 degree Celsius a little more than 3 mm of expansion and contraction is expected to occur.

Expansion and contraction due to changes in humidity

When humidity increases, Acry Warlon absorbs water and expands, and when humidity decreases, it dries out and shrinks. If the difference in humidity between the winter and summer months is 70%, Acry Warlon with a length of 1000 mm is expected to expand and contract by more than 3mm.

<Example>

When using Acry Warlon with a length of 1000 mm, the elongation is approximately 6.0 mm when the temperature difference between winter and summer is set to 40 degree Celsius and the humidity difference is 70% (20-90%). When using Acry Warlon, take this dimensional change into account before making a clearance. (Figure 1).

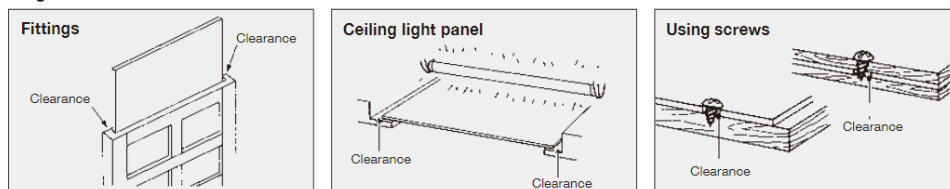
*Especially in winter (low temperature and low humidity environment), the growth rate is higher in summer.

Horizontal use guidelines (maximum frame sizes in order to avoid sagging / warping of Acry Warlon.)

Thickness	Frame shape	Square	Rectangular	Triangular (maximum side length)	Circular (diameter)
2.0mm		450mm×450mm	350mm×1800mm	up to 650mm	up to 440mm φ
3.0mm		600mm×600mm	400mm×1800mm	up to 850mm	up to 580mm φ
5.0mm		900mm×900mm	550mm×1800mm	up to 1200mm	up to 800mm φ

For vertical use: When a large piece of Acry Warlon is used vertically, appropriate frame/lattice is also required to avoid sagging of the product. Contact us for details.

<Figure 1>



UV block rate / Light transmittance

Item number	Thickness(mm)	Light transmittance(%)	UV block rate(%)
Printed Acrylic			
P-2	1.0	76	95
	1.5	70	95
	2.0	69	95
	3.0	65	95
P-52	1.0	69	95
	1.5	68	95
	2.0	66	95
	3.0	63	95
P-90	1.0	62	96
	1.5	60	96
	2.0	59	96
	3.0	54	96
P-80	1.0	66	96
	1.5	65	96
	2.0	65	96
	3.0	61	96
P-81	1.0	68	96
	1.5	67	96
	2.0	67	96
	3.0	63	96
P-83	1.0	64	97
	1.5	63	97
	2.0	63	96
	3.0	57	98
P-85	1.0	67	96
	1.5	67	96
	2.0	63	96
	3.0	63	96
P-95	1.0	69	95
	1.5	68	95
	2.0	64	95
	3.0	63	95
P-97	1.0	61	97
	1.5	60	97
	2.0	59	96
	3.0	56	97

Item number	Thickness(mm)	Light transmittance(%)	UV block rate(%)
Printed Acrylic			
PN-2	2.0	54	98
	3.0	52	98
	5.0	41	99
PN-52	2.0	53	98
	3.0	50	98
	5.0	39	99
PN-90	2.0	50	98
	3.0	46	99
	5.0	38	99
PN-80	2.0	45	98
	3.0	39	98
	5.0	31	99
PN-81	2.0	50	99
	3.0	46	99
	5.0	39	99
PN-83	2.0	48	99
	3.0	44	99
	5.0	39	99
PN-95	2.0	54	99
	3.0	50	99
	5.0	39	99
PN-97	2.0	48	98
	3.0	43	98
	5.0	35	99

Specifications

Thickness	1.0mm / 1.5mm / 2.0mm / 3.0mm / 5.0mm
Sizes *	910mm × 1820mm / 1100mm × 1360mm / 1000mm × 2000mm