SIBUGLAS / OPACO-LINE



EN

UPDATE 2.1

DESIGN OVERVIEW



SG MARBLE Brown AR+



PR+

SG MARBLE Alpine AR+



PR+

SG MARBLE Black AR+

SG MARBLE White AR+

PR+



SG MARBLE Grey AR+



SG MARBLE PR+ Emperador AR+



SG LUXURY Gold AR+



SG LUXURY Bronze AR+

PR+

SG OLD Platin AR+ PR+

SG Hollywood





PR+

SG VINTAGE Silver AR+



SG VINTAGE Copper AR+



PR+

PR+

SG GENESIS Grey AR+

PR+

PR+

SG GENESIS PR+

White AR+







SG LEGUAN Silver AR+



SG LEGUAN Gold AR+



SG LEGUAN Copper AR+

PR+



PR+

SG LEGUAN Silk AR+



PR+ Nero AR+

SIBUGLAS / OPACO-LINE sheets have been developed exclusively for interior use!

AR+ products offer outstanding abrasion resistance. NA non-adhesive / SA self-adhesive (high-quality acrylate adhesive)







PR+



SG GRID Gold AR+

PR+



SG GRID Rose AR+ PR+

SG CURVED Silver AR+



SG CURVED Gold AR+

PR+

SG CURVED Rose AR+

PR+



Silver AR+

SG ALIGNED Silver AR+



PR+

PR+









OL GENESIS PR+ White matt AR OL MARBLE White matt AR

PR+

OL MARBLE PR+ Black matt AR

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AREAS OF APPLICATION / ADVANTAGES

EVENTS – When an occasion should be really special!
FURNITURE PRODUCTION – Where superb design and excellent technology make a joint appearance.
HOTELS – In every area, where "standard" is to be surpassed.
TABLE TOPS – Where the very best of taste is required.
HOMES – Where design is in demand, whether for new buildings, or renovations.
WALL PANELS – SIBU DESIGN structured sheets lend large surfaces a sparkling presence.
SLIDING DOORS – Where exclusive designs with a genuine glass look meet the most stringent standards.
INTERIORS – For columns, wall coverings and dividing walls.
DISPLAY WINDOWS – For goods presentations, displays, back walls, curtains, …
TRADE FAIRS & SHOP FITTINGS – Eye-catchers, stand walls, displays, lettering, podiums, …
LABELLING / DISPLAYS – For extravagant task settings





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GROUNDS – BONDING – EXPANSION GAPS

The ground must be dry and smooth, and free from loose material, dust, dirt, grease, wax and silicone. SIBU patterned sheets should never be mounted onto an uneven surface, as this results in a loss of visual quality.

In the case of convex and concave surfaces, the sheet edges must be fixed mechanically.

Non-absorbent surfaces:

In order to achieve maximum adhesion, always clean non-absorbent surfaces with alcohol (ethanol, isopropyl alcohol).

Self-adhesive (SA) sheets are ideally suited to non-absorbent surfaces such as coated MDF/chipboard, glass, metal, plastic, etc. However, they are unsuitable for use on ceilings. Alternative processing options are available on request.

Absorbent surfaces:

A solvent-free adhesive, which is suitable for both the underlying surface and the polystyrene material, must be employed on absorbent grounds, e.g. uncoated chipboard, MDF, plasterboard, or smoothed brickwork. Sibu recommendation: SIBUKLE D22 HV.

Ideal processing temperatures range from + 10 °C to + 30 °C. The design sheets must be acclimatised, i.e. be brought to room temperature prior to processing (avoidance of condensation on the gluing surface and a reduction in sheet expansion due to reduced temperature differences).

A temperature increase of 10 $^{\circ}$ C will cause our products to expand by approx. 0.7 mm over a length of 1 m.

As a rule, an approx. 2-3 mm expansion joint is to be left along the sheet edges!

In the case of high ambient temperatures, or major temperature fluctuations, the expansion gap should be increased, or a smaller sheet format selected.

Remove the paper backing from the reverse side of self-adhesive patterned sheets (SA) step-by-step. Do not touch the adhesive surface and press the sheet onto the ground as firmly as possible. Avoid the formation of bubbles (air inclusions) and use a mediumhard, rubber roller with a width of approx. 170 mm.

Full adhesion will be reached at room temperature after 24 hours.

Whenever possible, SIBU DESIGN products should be processed within 12 months (except for PVA pre-treated products, please see the PVA news update at www.sibu.at).

They are not recommended for use near open fires or sources of intense heat.

BONDING USING SIBUKLE

SIBUKLE is suitable for the bonding of SIBUGLAS AND OPACO-LINE products on absorbent, level surfaces such as wood, plywood, chipand plasterboard, concrete or smoothed masonry. PLEASE NOTE: SIBUKLE is totally unsuitable for non-absorbent surfaces such as tiles, plastic coverings, metal, glass, etc.

Processing: once the ground surface for laying has been prepared and cleaned, fully cover it alone with adhesive using a spatula with A2 teeth and then press down. It is essential that products be bonded in a bed of wet adhesive. When required fix mechanically until the adhesive has hardened. Please follow the processing guidelines on the adhesive label.

BONDING & POINTING WITH SIBU SILICON

(Acetic acid free, textured natural stone silicone)

Bead bonding:

On the reverse side of the sheet: vertical positioning of a silicone bead at a distance of 10 mm from the edge of the sheet or the profile leg, then position a mirrored adhesive tape at a distance of 10 mm. It is recommended that the protective strip on the mirrored tape be removed prior to the further processing phases.

Apply vertical beads of adhesive to the reverse side of the sheet at intervals of approx. 10 mm to the mirrored adhesive tape. (Depending on the underlying surface, the beads should have a height of at least 4 mm.) Apply the other silicone beads at a distance of 60 mm.

Silicone bead Mirror tape

The illustration does not show the entire length of the panel

Bring the sheet into position without any drying time and then press it down onto the prepared surface by means of vertical strokes with a soft wallpaper roller.

The gluing can also be done without mirror adhesive tape!

Advantage: The sheet can be positioned much easier.

Disadvantage: The sheet has to be temporarily attached until the silicone beads have cured in order to prevent the plate from slipping unintentionally.

Once the adhesive has hardened, the joints can be sealed with silicone.

Immediately remove the protective film from the sheet and any possible adhesive residues.

PVA BONDING

(please see page 10)

MAGNETIC

With the magnetic finish professional decoration changes become a child's play. Deliveries can be made for orders of three sheets and upwards. Any surfaces suitable for magnets can be used as a ground and should these be unavailable, SIBU METALFOIL provides the solution.

SURFACE PROTECTION

All the top surfaces are safeguarded against damage by a protective film (Polyethylen/PE), which should first be removed following processing.

GOLDEN RULES

As a rule, complete processing on the patterned side (for this reason jig- and hand-held circular saw working must take place on the reverse side).

It is imperative that sheet flapping be avoided totally during all working phases.

Always lay the sheets out flat and if necessary pin them down.

Select the speed and feed that are adapted to the saw blade. Use sharp cutting tools!

The generation of heat should be constantly avoided, as this can result in material tension.

MECHANICAL PROCESSING OF THE PATTERNED SHEETS PRIOR TO ADESIVE APPLICATION

Sawing

Sheets can be cut with jig, hand-held circular, panel and circular table saws. During cutting on the reverse side, the underlay should also be sawn through. Then deburr all cut edges.

• Cutting to length using a hand-held or plunge cut circular saw

Cut from the reverse side and use a stable underlay. Recommended saw blade: 160x2.2 hard metal blade with 48 alternating teeth.

• Cutting to length using a jigsaw

Set the pendulum action to zero, or at a maximum to I and then saw from the reverse side.

The patterned sheet must lie fully on the jigsaw cutting table in order to ensure that no vibrations are created. Recommended saw blade: employ saw blades with a tooth pitch of 1.2 to max. 2.5 mm. (coarse metal saw blade / fine wood saw blade / preferably PMMA saw blades).

Drilling

All drillings must be carried out on a stable underlay. Recommended drill: wood drill (centring tip drill), Forstner drill and hard metal drill with centring tip.

Core drills for wood or hole saws (BI-metal) can also be used. Fix the design sheet on a stable surface.

FLAMMABILITY

SIBUGLAS / OPACO-LINE products are subject to standard flammability pursuant to EN 13501-1 Class E.

LASER CUTTING

Design sheets can be processed using standard lasers. The cutting speed is in line with the laser wattage.

Note: Place the design sheet on the laser machine in such a way that its reverse side is on the machine's extraction side. As is the case with all standard PMMA products, it is recommended that following laser cutting the material be "tempered". The high temperature of the laser causes tension in the material, which can lead to cracking. Tempering equalises these tensions.

PRINTING

SIBUGLAS: digital/screen printing possible

OPACO-LINE: screen printing possible. Prior to printing a corona or plasma treatment has to be carried out. On request available in pre-treated version.

Owing to the many differing printing and colour systems, customers must carry out a printing test. The result will depend on the respective motif. We will be pleased to provide original samples for testing.

CLEANING / CARE

Standard household cleaners without scouring agents can be used.

DISPOSAL

Current LGA certificates exist for SIBUGLAS and OPACO-LINE. We are pleased to make these available. Private area: Sheets an be disposed of with the normal household refuse.

Commercial area: Sheets should be conducted to thermal disposal.

STORAGE INFORMATION

Always store products dry and flat, and protect them against the effects of humidity.

Wrap the sheets in plastic together with a silicate cachet and seal carefully. This prevents possible ripples along the sheet edges due to moisture in the air.

Outdoor storage is not possible

The following should be noted:

In order to prevent damage, the card underlay should be used and weighed down over its entire area. The uppermost sheet in the stack should be stored face down.

In storage, design sheets must be protected against sunlight and do not expose to wetness of damp.

The material should also be safeguarded against dirt, dust and mechanical damage.

TRANSPORT INFORMATION

When transporting SIBUGLAS / OPACO-LINE care should be taken that the sheets are protected against dirt, UV rays, moisture and

mechanical damage.

Stable, flat pallets that are larger than the sheets are to be employed with a card underlay.

The uppermost sheet must lie on the pallet with the structured face down. In addition, this top sheet should be protected by card and a slatted frame.

The edges and the sides must also be safeguarded (edge protection, PE film, ...).

The temperatures below minus 35° C or above 50° C should not be exceeded.

SIBUGLAS SA, OPACO-LINE SA -BONDED ONTO COATED WOOD BASED SHEETS INCLUDING EDGES AND MILLING

MATERIAL REQUIREMENTS

SIBU decorative sheet:

SA dimension: 2600 x 1000 mm, self-adhesive

Wood based sheet:

Wood based sheet coated on both sides, dimensions: $2600 \times 1000 \text{ mm}$

Counter-pressure: Not required

Edge material: All standard furniture edging

PROCESSING STEPS

- I. Clean the coated wood sheet.
- 2. Remove the protective film on the adhesive side of the design sheet.
- 3. Bond the design sheet onto the wood based sheet using a rubber roller.
- 4. Immediately cut the bonded sheets into the desired final dimensions (saw).
- 5. Place the edgings on the edge gluing machine.
- 6. Using an electrical manual router, cut a rounded or chamfered edge exactly up to the point of transition from the transparent PMMA layer/PS layer to the structured layer. Please see sketch! In combination, the edge material and the transparent PMMA layer/PS layer give the resultant radius or chamfer. The thicker the edge material, the wider the facet.

FACET MILLING IS THE PREREQUISITE FOR AN EDGED END PRODUCT!





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Whether on home furniture, in display windows, bars, hotels, or trade fair stands, today SIBUGLAS and OPACO-LINE is used for a diversity of applications.

SIBUGLAS is a multilayer sheet comprised of PMMA, PU leather, a special synthetic leather or a special paper. The OPACO-LINE is a multilayer sheet comprised of a matt polyester surface, a polystyrene carrier and a special paper. This multilayer sheets can be bonded onto absorbent surfaces using PVA white glue. In order to ensure optimum flatness, we also deliver an accompanying, technically matching balancing sheet.

PROCESSING

Both reverse sides (design and balancing sheet) are saturated with PVA white glue as evenly and quickly as possible using a roller. They are then laid on both sides of the absorbent wood based sheet and this composite is subsequently placed in a sheet press.

DESCRIPTION – STRUCTURE

SIBUGLAS / OPACO LINE decorative sheet ______ PVA white glue ______ Wood based sheet ______ minimum thickness of 16 mm! Use thicker wood based sheets for larger formats! PVA white glue ______ Balancing sheet _____



Decorative sheets that have been glued and pressed in this manner can be easily processed with the majority of woodworking machinery and tools with good results. The PE protective film must be left on the top surface during processing. Optimum machine parameters, tool layout and cutting speeds are to be determined individually prior to production on the basis of a sample.

BONDING INSTRUCTIONS FOR SIBUGLAS SHEETS WITH PVA WHITE GLUE

Glue application: only use flat, wood based sheets!

The acclimatised design and balancing sheets, as well as the wood based sheet, should be laid out adjacent to one another on a straight, clean and sufficiently large work table. The wood based sheet must be roughly cut 10mm larger than the design sheets / balancing sheets. Both sheets - the design sheet and the balancing sheet - should first be generously coated with PVA glue using a roller. Owing to the highly absorbent reverse side, the consumption of PVA white glue is considerable. Subsequently, both sheets (design sheet and balancing sheet) are positioned as quickly as possible on the middle of the wood based sheet.

! Warning! Glue should not be applied directly to the wood based sheet, as this can have a negative effect on evenness!

Pressing:

The composite sheet is now placed in the press for approx. 30 minutes at 30° C. Do not apply excessive pressure and take into account both your know-how and the values gained from personal experience. Standard value: 20 N/cm^2 or 2 kg/cm^2 .

As soon as the sheets are removed from the press, they must be stored under stacking pressure for at least 12 hours in a FLAT position. A genuinely even surface is extremely important for the flatness of the composite sheet!

A second possibility for small batches is to press the sheets in the machine overnight at approx. 20° C. This type of processing eliminates the need for subsequent stack pressure.

Always clean the press thoroughly prior to processing sheets!

Cutting to length/edge trimming and other processing steps:

With standard woodworking machines: Recommendation: Fine cut saw blades

At the earliest, complete this work 12 hours after gluing/ pressing!

Edging application: As usual, any standard edging can be mounted in the familiar manner!

BALANCING SHEET

A technically matching balancing sheet is required for the glued and pressed composite (surface + wood based sheet + counter-pressure) that is ideally matched to the characteristics of the materials used. This virtually rules out warping due to heat, cold or fluctuating humidity.

For SIBUGLAS and OPACO-LINE (PMMA 2 mm) we recommend the use of the PMMA Balance Sheet White 2800x1250x2 (article number: 20278) for balancing.

If the PMMA Balance Sheet White has not been pressed within six months, we recommend a check on the surface tension of the reverse side and if required, its subsequent surface treatment. This information tool was provided according to the best knowledge and with special care. The information is based on practical experiences, test results as well as on in-house testing and corresponds to our today's state of knowledge. Detailed info sheets are available on request. No liability is accepted for misprints, norm errors and mistakes!

SIBU | DESIGN

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