

SIBU GLAS INFOS

UPDATE 1.4 C GB



SIBU
DESIGN

DESIGN OVERVIEW



SG Ice White
2600 x 1000 x 2.7 mm
NA 17937 / SA 17919

SG Ice White AR+
2600 x 1000 x 2.7 mm
NA 17915 / SA 17941



SG Bianco
2600 x 1000 x 2.7 mm
NA 17934 / SA 17938

SG Bianco AR+
2600 x 1000 x 2.7 mm
NA 17912 / SA 17916



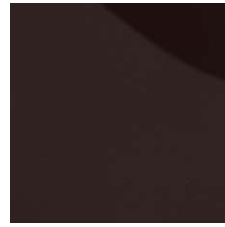
SG Magnolia
2600 x 1000 x 2.7 mm
NA 17936 / SA 17940

SG Magnolia AR+
2600 x 1000 x 2.7 mm
NA 17914 / SA 17918



SG Malaga
2600 x 1000 x 2.7 mm
NA 17987 / SA 17989

SG Malaga AR+
2600 x 1000 x 2.7 mm
NA 17963 / SA 17965



SG Mocca
2600 x 1000 x 2.7 mm
NA 17986 / SA 17988

SG Mocca AR+
2600 x 1000 x 2.7 mm
NA 17962 / SA 17964



SG Nero
2600 x 1000 x 2.7 mm
NA 17935 / SA 17939

SG Nero AR+
2600 x 1000 x 2.7 mm
NA 17913 / SA 17917



**SG FLEUR
Black/Gold**
2600 x 1000 x 1.5 mm
NA 17946 / SA 17953

**SG FLEUR
Black/Gold AR+**
2600 x 1000 x 2.4 mm
NA 17821 / SA 17842



**SG LUXURY
Gold**
2600 x 1000 x 2.2 mm
NA 17944 / SA 17951

**SG LUXURY
Gold AR+**
2600 x 1000 x 3.1 mm
NA 17819 / SA 17840



**SG LUXURY
Bronze**
2600 x 1000 x 2.2 mm
NA 17945 / SA 17952

**SG LUXURY
Bronze AR+**
2600 x 1000 x 3.1 mm
NA 17820 / SA 17841



**SG LACE White/Vintage
Brown**
2600 x 1000 x 1.5 mm
NA 17943 / SA 17950

**SG LACE White/Vintage
Brown AR+**
2600 x 1000 x 2.4 mm
NA 17818 / SA 17839



**SG LACE
Black/Platin**
2600 x 1000 x 1.5 mm
NA 17942 / SA 17949

**SG LACE
Black/Platin AR+**
2600 x 1000 x 2.4 mm
NA 17817 / SA 17838



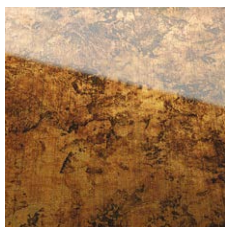
**SG ANTIGUA
Gold**
2600 x 1000 x 2.2 mm
NA 17947 / SA 17954

**SG ANTIGUA
Gold AR+**
2600 x 1000 x 3.1 mm
NA 17822 / SA 17843



SG Vintage Silver
2600 x 1000 x 1.9 mm
NA 17158 / SA 17160

SG Vintage Silver AR+
2600 x 1000 x 2.8 mm
NA 17197 / SA 17199



SG Vintage Copper
2600 x 1000 x 1.9 mm
NA 17159 / SA 17161

SG Vintage Copper AR+
2600 x 1000 x 2.8 mm
NA 17198 / SA 17200



SG PEARL RAY Gold
2600 x 1000 x 2.0 mm
NA 17006 / SA 17010

SG PEARL RAY Gold AR+
2600 x 1000 x 2.9 mm
NA 17012 / SA 17014



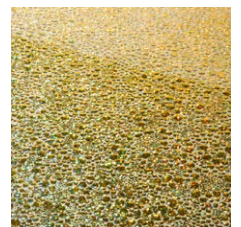
SG COCKTAIL Opal
2600 x 1000 x 2.4 mm
NA 16987 / SA 16990

SG COCKTAIL Opal AR+
2600 x 1000 x 3.3 mm
NA 16997 / SA 17000



SG COCKTAIL Sapphire
2600 x 1000 x 2.4 mm
NA 16988 / SA 16991

SG COCKTAIL Sapphire AR+
2600 x 1000 x 3.3 mm
NA 16998 / SA 17001



SG COCKTAIL Amber
2600 x 1000 x 2.4 mm
NA 16989 / SA 16992

SG COCKTAIL Amber AR+
2600 x 1000 x 3.3 mm
NA 16999 / SA 17002



SG YUKON
2600 x 1000 x 1.5 mm
NA 17005 / SA 17009

SG YUKON AR+
2600 x 1000 x 2.4 mm
NA 17011 / SA 17013



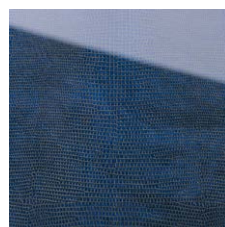
SG LEGUAN Silver
2600 x 1000 x 1.9 mm
NA 16967 / SA 16968

SG LEGUAN Silver AR+
2600 x 1000 x 2.8 mm
NA 16975 / SA 16979



SG LEGUAN Copper
2600 x 1000 x 1.9 mm
NA 16969 / SA 16972

SG LEGUAN Copper AR+
2600 x 1000 x 2.8 mm
NA 16976 / SA 16981



SG LEGUAN Blue
2600 x 1000 x 1.9 mm
NA 16971 / SA 16974

SG LEGUAN Blue AR+
2600 x 1000 x 2.8 mm
NA 16978 / SA 16984

SIBUGLAS structured sheets have been developed exclusively for interior use!

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

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i This information tool was prepared to the best of our knowledge and with special care. The data provided is based on Practical experience, test results and company experiments and corresponds with our current know-how level. No responsibility is accepted for misprints, standard-related mistakes and errors.



SG FLEUR Black/Gold AR+

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 – SIBUGLAS 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 presentations.

PRODUCT ADVANTAGES

Flexible handling: highly or non-adhesive, also for PVA/PUR pressing.

High-gloss, glassy brilliance with an excellent depth effect.

Far better fracture resistance than glass and easier to handle.

Half the weight of glass.

Owing to a balanced and resistant reverse side, SIBUGLAS offers strong bonding without counter-pressure.

SIBUGLAS in the AR+ version has a scratch-resistant surface that can even withstand steel wool.

Monochrome and trend-designs available in over 20 colours/ patterns.

Top quality product look.



APPLICATION EXAMPLES



SIBUGLAS STANDARD PROCESSING

GROUNDS - BONDING - EXPANSION GAPS

Strongly adhesive SIBUGLAS SA structured sheets are suitable for use on both absorbent and non-absorbent surfaces such as plasterboard, raw particle board and smooth masonry, **whereby non-absorbent surfaces are recommended.**

The ground surface must be clear of any loose material, be capable of providing support, dry, smooth and free of dust, dirt, grease, wax and silicone. In order to achieve maximum adhesion, non-absorbent grounds should always be cleaned with alcohol (ethanol, isopropyl alcohol).

In the case of convex and concave grounds, mechanical anchorage is required along the edges.

The ideal processing temperature range is between + 10° C and + 30° C. Prior to processing, the SIBUGLAS sheets must be brought up to room temperature (in order to avoid the formation of condensation on the adhesive surface).

As a rule, an approx. 2-3 mm expansion gap must be left on the sheet edges. In the case of higher ambient temperatures and sizeable temperature fluctuations, the expansion gap should be larger, or smaller sheet dimensions be selected.

It is imperative that air bubbles be avoided and therefore a medium-hard, rubber hand roller with a width of around 170 mm should be employed. In the case of the strongly adhesive SIBUGLAS (SA) sheets, the film protecting the adhesive should be removed gradually without touching the glue. The sheet should then be pressed down as firmly as possible onto the ground surface. At room temperature, final bonding strength is first reached after 24 hours.

BONDING & POINTING WITH SIBU SILICON 1.4 A

This type of processing is most suitable on ground surfaces such as plasterboard, absorbent and non-absorbent wood sheets smooth masonry and tiles. Silicone bead: height approx. 3-4 mm, 10 mm gap to the edge of the sheet and a distance of approx. 60 mm distance from bead to bead.

Cleaning: remove any dirt from the silicone as quickly as possible!

PVA/PUR BONDING (please see pages 12-15)

MAGNETIC

With SIBUGLAS MAGNETIC professional decoration changes become 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, which should first be removed following processing.

USE OF SIBU PROFILES

The profiles have to be brought up to room temperature prior to processing. Cutting to length must always begin on the top surface and the profiles be sawn for bevelling and precisely angled edge quality.

The profiles must be positioned in such a way that the sheet material to be covered can expand behind the profile nose (1-3 mm). Precise positioning of the profiles on the ground surface is essential, as once stuck down the profiles cannot be newly bonded.

SIBU SILICON 1.4 can be used as an adhesive when standard, metal T- or end profiles are employed. In this case corrections during installation are still possible, subject to the precondition that the SIBUGLAS sheet is also bonded with SIBU SILICON 1.4 A.

SURFACE SEALING only in the case of **non-AR+** SIBUGLAS sheet versions.

We recommend that SIBUGLAS sheet surfaces be polished immediately after mounting. As is the case with automotive paint, this offers good scratch protection. Moreover, with our acrylic POLISHING KIT superficial traces of wear and scratches in the SIBUGLAS surface can always be polished out. The POLISHING KIT contains a polish paste, a sponge and a polishing cloth.

GOLDEN RULES for all types of cutting

Use high machine speeds, rapid advance and sharp tools!

Wherever possible, heat should always be avoided, as this can lead to material tensions.

SAWING

SIBUGLAS 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.

Information: jigsaws. Prior to cutting with a jigsaw, the SIBUGLAS sheet should be anchored to the work table by means of an aluminium lath and screw clamps. Cutting should take place at approximately 2,000 strokes/min with rapid advance and no pendulum stroke. Sheet wobble and tilting of the jigsaw (heat generation) are to be avoided. Cutting with the jigsaw should always take place from the reverse side.

Saw blade. Use a standard jig saw blade with teeth spacing of 1.0-2.0 mm, or a Bosch "Clean for PMMA" blade with teeth spacing of 1.8 mm.

Information: hand-held circular saws. Prior to cutting with the hand-held circular saw, the SIBUGLAS sheet should be anchored to the work table by means of an aluminium lath and screw clamps. The saw blade overlap should amount to between 10 and 20 mm. Rapid advance and maximum rpm should be used. The saw blade must not tilt (heat generation) and sheet wobble is to be avoided. Cutting with the hand-held circular saw should always take place from the reverse side.

Saw blade. Use a blade with alternate chamfered teeth at spaces of approx. 10 mm irrespective of the saw blade diameter.

Information: panel and circular table saws. Use rapid advance at approx. 4,000 rpm and a saw blade diameter of around 300 mm. The saw blade overlap should amount to between 10 and 20 mm. Do not use circular saw blades with cross-set teeth.

Ideal circular saw blade. Tooth form: flat, trapezoidal teeth, diameter: 300 mm, total teeth: 72, tooth distribution: approx. 13 mm. During the cutting or milling of recesses or openings, the corners of the cut edges should always be pre-drilled. This prevents notch effects and thus the danger of sheet fracture. The drillings should have a diameter of approx. 10 mm.

FLAMMABILITY SIBUGLAS products are subject to standard flammability pursuant to DIN 4102 B2.

DRILLING

Small drillings are carried out with an acrylic glass spiral drill, while a core drill with, e.g. 4-6 carbide tips is employed for larger drillings and recesses. If the SIBUGLAS is anchored firmly, a well-honed wood drill can also be used.

Cutting and processing data for acrylic glass spiral drills. Free angle: 3° to 8°, rake angle 0° to 4°, point angle 60° to 90°, twist angle 12° to 16°, cutting speed 10 to 60 m/min, advance 0.1 to 0.3 mm/rev. Always slightly chamfer and countersink the drillings.

Information for standard metal spiral drills. Prior to use, these must be suitably sharpened for the material.

Rake angle 0° to 4°, point angle 110° to 130°. Wherever possible, laser drilling is preferable.

EDGE PROCESSING

Cut, sawn or milled edges should be smoothed and deburred using a scraper or a machine file (an acrylic file is better).

Edge profiling. The edges can be easily brought into the desired shape using a profile cutter with a ball bearing (please see page 9).

Edge polishing. Smooth SIBUGLAS cut edges can be simply polished manually using polishing paste.

LASER CUTTING

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

Note. Place the SIBUGLAS 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

Standard SIBUGLAS products (non-AR+) are suitable for printing, pre-testing is advisable for SIBUGLAS AR+.

CLEANING/CARE

Warm water with washing-up liquid or oil-free benzine are suitable cleaning agents. Soiled cloths and abrasive cleaning agents are to be avoided. No razor blades, knives or scrapers should be used with SIBUGLAS AR+, as they can cause scratches and damage the abrasion-resistant coating. Dry rubbing is to be avoided under all circumstances.

As is the case with all standard PMMA products, it is recommended that following laser cutting the material be "tempered".

DISPOSAL

Current LGA certificates exist for SIBUGLAS. We are pleased to make these available.

Private area. SIBUGLAS can be disposed of with the normal household refuse.

Commercial area. SIBUGLAS should be conducted to thermal disposal.

STORAGE INFORMATION

Always store SIBUGLAS 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 and the following should be noted. Sheets delivered in rolls should be unpacked immediately and laid down flat with the topside pointing upwards. Flatness is improved by weighing down. 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, SIBUGLAS must be protected against sunlight and not come into contact with any liquids or damp. The material should also be safeguarded against dirt, dust and mechanical damage.

TRANSPORT INFORMATION

When transporting SIBUGLAS 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, ...) and temperatures below minus 35° C or above 50° C should not be exceeded. Basically, thin SIBUGLAS sheets with thicknesses of 1.5 to 2.4 mm can be transported in rolls.

INCOMPATIBLE SUBSTANCES - SIBUGLAS AR+

In accordance with the surface test for chemical impact pursuant to DIN EN 68 861-1 testing conditions.

During this test no changes were determined. The only exception: red wine, as after 24 hours the surface was slightly matt.

SIBUGLAS SA

BONDED ONTO COATED WOOD BASE SHEETS
INCLUDING EDGES AND MILLING

MATERIAL REQUIREMENTS:

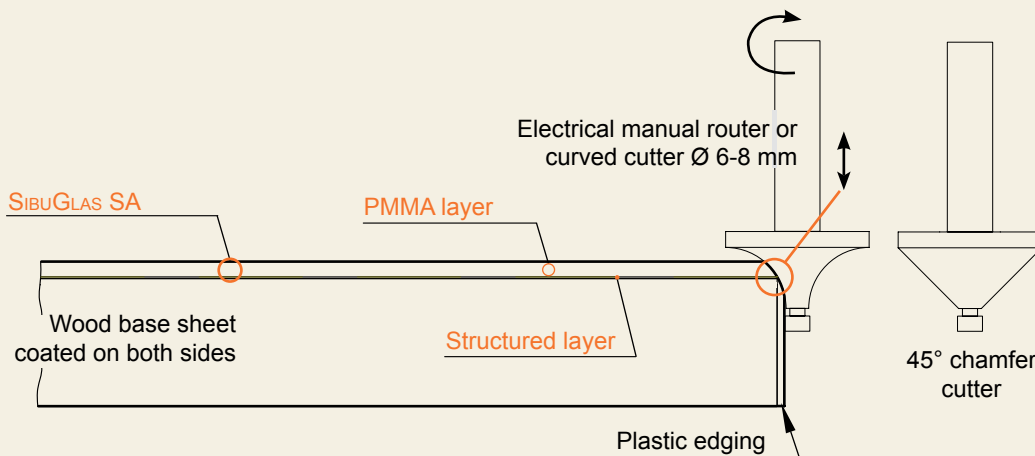
- SIBU structured sheet: **SIBUGLAS SA** dimensions: 2,600 x 1,000 mm, strongly adhesive
Wood base sheet: **Wood base sheet coated on both sides**, dimensions: 2,600 x 1,000 mm
Counter-pressure: **Not required**
Edge material: **All standard furniture edging**

PROCESSING STEPS:

1. Clean the coated wood sheet.
2. Remove the protective film on the adhesive side of the SIBUGLAS sheet.
3. Bond the SIBUGLAS sheet onto the wood base 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 to the structured layer. Please see sketch!**

In combination, the edge material and the transparent PMMA 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!



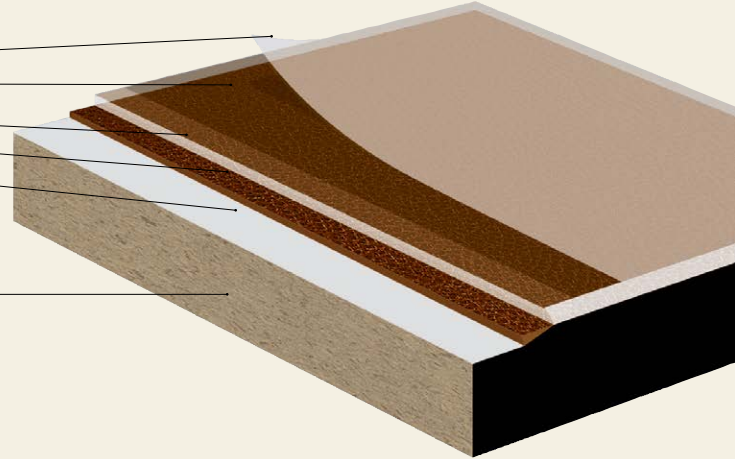
**SIMPLY
CREATE
STYLE!**

SIBUGLAS DESCRIPTION - STRUCTURE

SIBUGLAS structured sheet

- PE-protective film
- Scratch-resistant surface, only in the **AR+** version
- Transparent PMMA layer, UV-resistant
- PU leather / structured layer, special synthetic fibres
- SA, strongly adhesive reverse side

Coated wood base sheet



SIBUGLAS STRUCTURED SHEET - PRODUCT STRUCTURE

SIBUGLAS is a compound material consisting of the following individual components. The characteristics of the individual materials, as well as correct processing, are decisive for the overall quality of components/decorative elements with SIBUGLAS.

Structure: SIBUGLAS

Total thickness: 1.93 – 2.53 mm

Transparent PMMA layer: 1.1 mm

Structured layer: 0.7 - 1.3 mm
(incl. special synthetic fibres)

SA, strongly adhesive reverse side: 0.13mm

Structure: SIBUGLAS, single colour

Total thickness: 2.83 – 3.43 mm

Transparent PMMA layer: 2.0 mm

Structured layer: 0.7 - 1.3 mm
(incl. special synthetic fibres)

SA, strongly adhesive reverse side: 0.13 mm

Structure: SIBUGLAS **AR+**

Total thickness: 2.83 – 3.43 mm

Transparent PMMA layer: 2.0mm with

excellent abrasion resistance

Structured layer: 0.7 – 1.3 mm
(incl. special synthetic fibres)

SA, strongly adhesive reverse side: 0.13 mm

The 1.1 or 2.0 mm transparent layer lends SIBUGLAS a genuine glass appearance with outstanding product characteristics.

VARIOUS APPLICATION EXAMPLES:

- Table tops
- Bar and furniture fronts
- Shelf floors
- Side walls
- Room doors
- Sales podiums
- Sliding doors

INCOMPATIBLE SUBSTANCES - SIBUGLAS AR+

In accordance with the surface test for chemical impact pursuant to DIN EN 68 861-1 testing conditions.

During this test no changes were determined. The only exception: red wine, as after 24 hours the surface was slightly matt.

GOLDEN RULES

Use high machine speeds, rapid advance and sharp tools!

SAWING/ EDGING

In order to optimise cut quality, we suggest the use of narrow, unset, carbide tipped circular saw blades for plastic and laminate surfaces with as many alternate and/or hollow teeth as possible. The saw blade should have a minimum speed of at least 2,800 rpm (preferably 4,000 rpm). The sheets should be sawn individually and scoring may not be employed. Ideally, the saw blade should not protrude by more than 10-20 mm.

A SAW BLADE TIP

Fa. Leitz, Art. No. 58453, diameter: 250 mm, width: 2.4 / 1.6 mm, number of teeth: 30, alternate teeth Z80/9.82.

The alternate teeth are bevelled on the outside (bevelling: 0.3 mm, 45°) and must also always be sharpened. For a clean-cut edge it is important that the saw blade is really sharp!

Do not use cross set-up circular saw blades!

MILLING

As is the case with sawing, **high speeds and careful and slow feeding should be used!**

Basically, the machinery and tools employed for woodworking are suitable for the processing of our SIBUGLAS sheets bonded onto wood base sheets. Narrow milling edges can be subsequently improved optically with a scraper or emery paste.

For a clean-cut edge, it is important that the tools are always well sharpened!

DRILLING

Use a **wood drill!** Hinge drillings and similar processes can be completed easily with a Forstner bit.

APPLYING FURNITURE EDGING

All standard, plastic furniture edging can be mounted using standard procedure.

SURFACE SEALING only in the case of **non-AR+** SIBUGLAS sheet versions.

With our acrylic POLISHING KIT superficial traces of wear and scratches in the SIBUGLAS surface can always be polished out. The POLISHING KIT contains a polish paste, a sponge and a polishing cloth.

STORAGE Please see page 08

CLEANING/CARE

Warm water with washing-up liquid or oil-free benzine are suitable cleaning agents. Soiled cloths and abrasive cleaning agents are to be avoided. No razor blades, knives or scrapers should be used with SIBUGLAS AR+, as they can cause scratches and damage the abrasion-resistant coating. Dry rubbing is to be avoided under all circumstances.

SIBUGLAS sheets may not be cleaned with alcohol or a solvent.

SURFACE PROTECTION

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

SIBUGLAS PVA

GLUED AND PRESSED ON ABSORBENT WOOD BASE SHEETS

Whether on home furniture, in display windows, bars, hotels, or trade fair stands, today SIBUGLAS is used for a diversity of applications. SIBUGLAS is a multi-layer sheet consisting of PMMA, PU leather and a special synthetic fibre, which 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.

SIBUGLAS / SIBUGLAS AR+ AR+ WITH SCRATCH-RESISTANCE SURFACE INCL. SIBUGLA BALANCING SHEET

A **major processing advantage** of our SIBUGLAS sheets is provided by a **special synthetic fibre on the reverse side** (on the structured sheet+balancing sheet). The saturated, synthetic fibres compensate for any small surface irregularities or fine, overseen particles of dirt. Both SIBUGLAS reverse sides 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 base sheet and this composite is subsequently placed in a sheet press.

As a result, perfect, high-gloss surfaces can be simply created.

SIBUGLAS DESCRIPTION - STRUCTURE

SIBUGLAS structured sheet

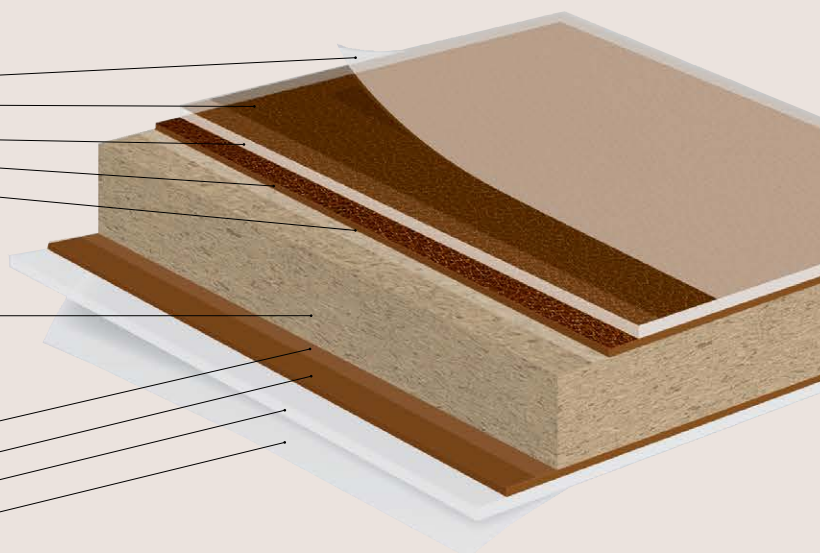
- PE protective film
- Scratch-resistant surface, only in the **AR+** version
- Transparent PMMA layer, UV-resistant
- PU leather / structured layer, special synthetic fibres
- PVA white glue

Wood base sheet,

minimum thickness of 16 mm!

SIBUGLAS balancing sheet

- PVA white glue
- PU leather / one-colour, special synthetic fibres
- PMMA sheet
- PE protective film



SIBUGLAS structured 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.

SIBUGLAS STRUCTURED SHEETS - PRODUCT STRUCTURE

SIBUGLAS is a compound material consisting of the following individual components. The characteristics of the individual materials, as well as correct processing, are decisive for the overall quality of components/decorative elements with SIBUGLAS.

Structure: SIBUGLAS

Total thickness: 1.8 – 2.4 mm

Transparent PMMA layer: **1.1 mm**

Structured layer: 0.7 – 1.3 mm
(incl. special synthetic fibres)

STRUCTURE: SIBUGLAS, SINGLE COLOUR

Total thickness: 2.7 – 3.3 mm

Transparent PMMA layer: **2.0 mm**

Structured layer: 0.7 – 1.3 mm
(incl. special synthetic fibres)

Structure: SIBUGLAS AR+

Total thickness: 2.7 – 3.3 mm

Transparent PMMA layer: **2.0 mm**
with **excellent abrasion resistance**

Structured layer: 0.7 – 1.3 mm
(incl. special synthetic fibres)

The 1.1 or 2.0 mm transparent layer lends SIBUGLAS a genuine glass appearance with outstanding product characteristics.

SIBUGLAS BALANCING SHEET

A technically matching balancing sheet is required for the glued and pressed composite (surface + wood base 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.

Total thickness: 1.8 mm or 2.7 mm

BONDING INSTRUCTIONS FOR SIBUGLAS SHEETS WITH PVA WHITE GLUE

Glue application: only use flat, wood base sheets!

The acclimatised SIBUGLAS structured and balancing sheets, as well as the wood base sheet, should be laid out adjacent to one another on a straight, clean and sufficiently large work table. The cut wood base sheet must be roughly 10mm larger than the SIBUGLAS sheets.

Both SIBUGLAS sheets should first be generously coated with PVA glue using a roller. Owing to the highly absorbent SIBUGLAS reverse side, the consumption of PVA white glue is considerable and amounts to approx. 200 – 300 g/m².

Shortly before bonding, the synthetic fibres should have a wet, sticky shine. Subsequently, both SIBUGLAS sheets are positioned as quickly as possible on the middle of the wood base sheet.

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

Pressing.

The composite sheet is now placed in the press for approx. 15 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/m² or 2 kg/m²

! 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 SIBUGLAS sheets! The cleanliness of the sheet press will be mirrored by the structured surface!

Wood base sheets with minimum warping (exception). If from the outset the wood base sheets are not exactly flat, the backing sheet should always be glued onto the hollow side (inner radius) and the structured sheet onto the side with the outward warp (outer radius). This facilitates further processing and installation.

Cutting to length/edge trimming and other processing steps. At the earliest, complete this work 24 hours after gluing/pressing!

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

INCOMPATIBLE SUBSTANCES - SIBUGLAS AR+

In accordance with the surface test for chemical impact pursuant to DIN EN 68 861-1 testing conditions.

During this test no changes were determined. The only exception: red wine, as after 24 hours the surface was slightly matt.

GOLDEN RULES

Use high machine speeds, rapid advance and sharp tools!

SAWING/ EDGING

In order to optimise cut quality, we suggest the use of narrow, unset, carbide tipped circular saw blades for plastic and laminate surfaces with as many alternate and/or hollow teeth as possible. The saw blade should have a minimum speed of at least 2,800 rpm (preferably 4,000 rpm). The sheets should be sawn individually and scoring may not be employed. Ideally, the saw blade should not protrude by more than 10-20 mm.

A SAW BLADE TIP

Fa. Leitz, Art. No. 58453, diameter: 250 mm, width: 2.4 / 1.6 mm, number of teeth: 30, alternate teeth Z80/9.82.

The alternate teeth are bevelled on the outside (bevelling: 0.3 mm, 45°) and must also always be sharpened. For a clean-cut edge it is important that the saw blade is really sharp!

! Do not use cross set-up circular saw blades!

MILLING

As is the case with sawing, **high speeds and careful and slow feeding should be used!**

Basically, the machinery and tools employed for woodworking are suitable for the processing of our SIBUGLAS sheets bonded onto wood base sheets. Narrow milling edges can be subsequently improved optically with a scraper or emery paste.

For a clean-cut edge, it is important that the tools are always well sharpened!

DRILLING

Use a **wood drill!** Hinge drillings and similar processes can be completed easily with a Forstner bit.

APPLYING FURNITURE EDGING

All standard, plastic furniture edging can be mounted using standard procedure.

SURFACE SEALING

 only in the case of **non-AR+** SIBUGLAS sheet versions.

With our acrylic POLISHING KIT superficial traces of wear and scratches in the SIBUGLAS surface can always be polished out. The POLISHING KIT contains a polish paste, a sponge and a polishing cloth.

STORAGE

 Please see page 08

CLEANING/CARE

Warm water with washing-up liquid or oil-free benzine are suitable cleaning agents. Soiled cloths and abrasive cleaning agents are to be avoided. No razor blades, knives or scrapers should be used with SIBUGLAS AR+, as they can cause scratches and damage the abrasion-resistant coating. Dry rubbing is to be avoided under all circumstances.

SIBUGLAS sheets may not be cleaned with alcohol or a solvent.

SURFACE PROTECTION

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

BALANCING SHEET OVERVIEW

6 DESIGN SHEETS USED AS BALANCING SHEETS



SG Ice White
2600 x 1000 x 2,7 mm
NA 17937



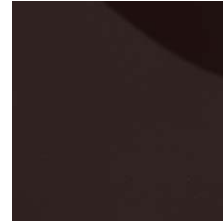
SG Bianco
2600 x 1000 x 2,7 mm
NA 17934



SG Magnolia
2600 x 1000 x 2,7 mm
NA 17936



SG Malaga
2600 x 1000 x 2,7 mm
NA 17987



SG Mocca
2600 x 1000 x 2,7 mm
NA 17986



SG Nero
2600 x 1000 x 2,7 mm
NA 17935

The six single-colour sheets shown serve as balancing sheets for the following listed articles:

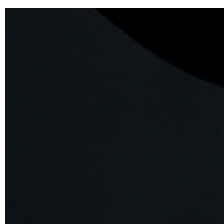
| | | | | | |
|-------------------------|-----------------|--|-----------------|-----------------------------|-----------------|
| SG Ice White | NA 17937 | SG FLEUR Black/Gold AR+ | NA 17821 | SG YUKON AR+ | NA 17011 |
| SG Bianco | NA 17934 | SG LUXURY Gold AR+ | NA 17819 | SG LEGUAN Silver AR+ | NA 16975 |
| SG Magnolia | NA 17936 | SG LUXURY Bronze AR+ | NA 17820 | SG LEGUAN Copper AR+ | NA 16976 |
| SG Malaga | NA 17987 | SG LACE White/Vintage Brown AR+ | NA 17818 | SG LEGUAN Blue AR+ | NA 16978 |
| SG Mocca | NA 17986 | SG LACE Black/Platin AR+ | NA 17817 | | |
| SG Nero | NA 17935 | SG ANTIGUA Gold AR+ | NA 17822 | | |
| SG Ice White AR+ | NA 17915 | SG Vintage Silver AR+ | NA 17197 | | |
| SG Bianco AR+ | NA 17912 | SG Vintage Copper AR+ | NA 17198 | | |
| SG Magnolia AR+ | NA 17914 | SG PEARL RAY Gold AR+ | NA 17012 | | |
| SG Malaga AR+ | NA 17963 | SG COCKTAIL Opal AR+ | NA 16997 | | |
| SG Mocca AR+ | NA 17962 | SG COCKTAIL Sapphire AR+ | NA 16998 | | |
| SG Nero AR+ | NA 17913 | SG COCKTAIL Amber AR+ | NA 16999 | | |

Further information see page 02

SPECIAL BALANCING SHEETS



SG Balance Sheet Bianco
2600 x 1000 x 1,8 mm
NA 18103



SG Balance Sheet Nero
2600 x 1000 x 1,8 mm
NA 18104

The two thinner balancing sheets are used **exclusively** for the following listed articles:

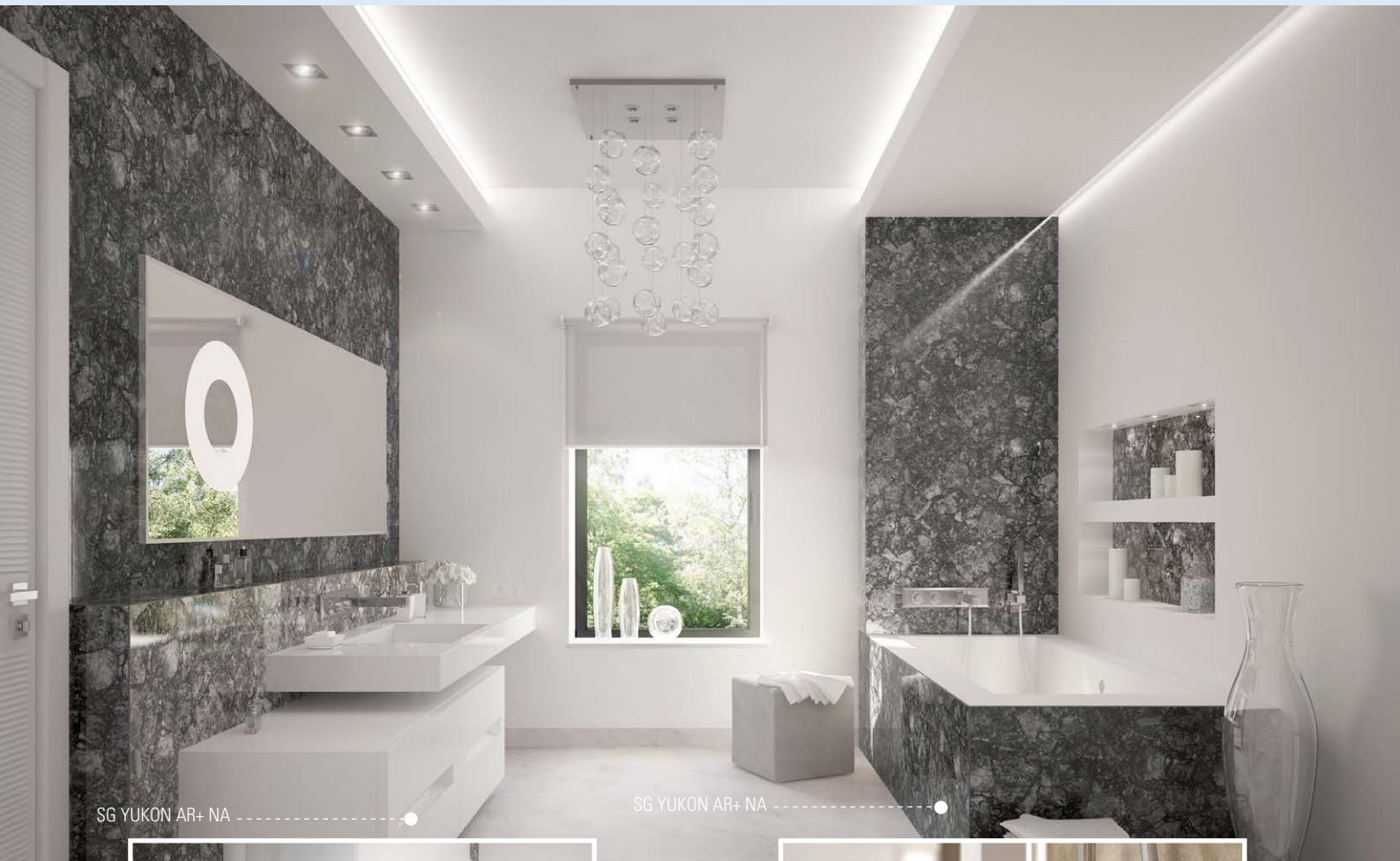
| | | | | | |
|------------------------------------|-----------------|-----------------------------|-----------------|-------------------------|-----------------|
| SG FLEUR Black/Gold | NA 17946 | SG Vintage Silver | NA 17158 | SG YUKON | NA 17005 |
| SG LUXURY Gold | NA 17944 | SG Vintage Copper | NA 17159 | SG LEGUAN Silver | NA 16967 |
| SG LUXURY Bronze | NA 17945 | SG PEARL RAY Gold | NA 17006 | SG LEGUAN Copper | NA 16969 |
| SG LACE White/Vintage Brown | NA 17943 | SG COCKTAIL Opal | NA 16987 | SG LEGUAN Blue | NA 16971 |
| SG LACE Black/Platin | NA 17942 | SG COCKTAIL Sapphire | NA 16988 | | |
| SG ANTIGUA Gold | NA 17947 | SG COCKTAIL Amber | NA 16989 | | |

Further information see page 02

SIBUGLAS AR+ NA

IN THE BATH- AND WET ROOM AREA

SIBUGLAS IS IDEAL FOR THE DESIGN AND RENOVATION OF BATHROOMS! MATERIAL REQUIREMENTS



SG YUKON AR+ NA

SG YUKON AR+ NA



SG LUXURY Bronze AR+ NA

MATERIAL REQUIREMENTS

Structured sheets: SIBUGLAS AR+ NA

Adhesive: SIBU SILICON 1.4 A

Joints/sealing: SIBU SILICON 1.4 A



is a **neutral, cross-linked** silicone that is required for processing. 1 cartridge is sufficient for approx. 1.5 to 2.0m².

Only acetic acid free, neutrally cross-linked silicone may be used.

INSTALLATION INFORMATION

TOOL REQUIREMENTS

Tape measure, spirit level, jigsaw or hand-held circular saw, aluminium lath, screw clamps, battery screwdriver, keyhole saw, scraper, files, cloths, rubber roller, marker, work table, masking tape, ground cleaner, SIBU SILICON 1.4 A.

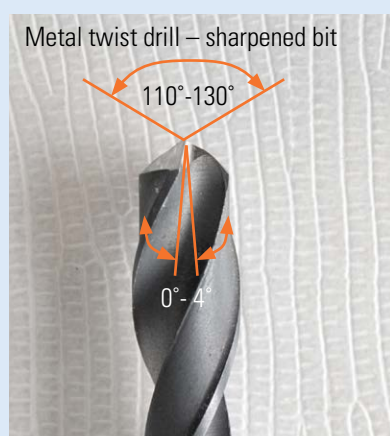
PREPARATIONS

1. Disassemble the sanitation systems such as taps, shower rails, etc.
2. Thoroughly clean and degrease - see page 19

Prior to beginning renovation work, the ground (e.g. wall tiles) must be cleaned and any possible mould or bacteria removed. In general, it is also necessary to renew the existing, flexible grouting between the shower basin and/or bath and the tiled wall.

PROCESSING STEPS

1. Measure the required sheet dimensions on the spot and take the exact measurement of the openings for armatures or any other apertures that may exist. Take into account a 3 mm silicone joint on the edge of the sheets and all openings.
2. Transfer the measurements to the SIBUGLAS structured sheets.
3. Anchor the SIBUGLAS with the aluminium lath and the screw clamps onto the work table for straight cutting and then use a saw with a fine blade. Where necessary, use a keyhole saw for the armatures and drill prior to bonding (please see mechanical further processing). Subsequently deburr the cut edges.
4. Draw the sheet formats on the ground using the marker. This will serve for the positioning of the adhesive application. Our silicone adhesive evens out any slight irregularities in the ground surface.
5. Bonding. Leave a gap of approx. 10 mm between the silicone bead and the edge of the sheet. Maintain a distance of approx. 60 mm between the beads. Bead height of approx. 3-4 mm. As the silicone will not adhere to damp surfaces, the ground must be absolutely dry.
6. Bring the sheet into position and press gently using a cloth. If necessary correct the position and finally press down firmly using a rubber roller.
7. Apply masking tape to the ground in the area of the silicone joints and to the structured sheet.
8. Prior to filling the joints and sealing the openings, read the instructions on the silicone cartridge.
9. Immediately remove the masking tap and any surplus silicone.



MECHANICAL PROCESSING OF SIBUGLAS IN A NON-BONDED CONDITION

GOLDEN RULES

Use high machine speeds, rapid advance and sharp tools!

Wherever possible, heat should constantly be avoided, as this can lead to material tensions.

CUTTING WITH A JIGSAW

Information: jigsaws. Anchor the SIBUGLAS sheet to the work table by means of an aluminium lath and screw clamps.

Cutting should take place at approximately 2,000 strokes/min with rapid advance and no pendulum stroke. Sheet wobble and tilting of the jigsaw (heat generation) should be avoided.

Saw blade. Use a standard jig saw blade with teeth spacing of 1.0-2.0 mm or a Bosch "Clean for PMMA" blade with teeth spacing of 1.8 mm.

CUTTING WITH A HAND-HELD CIRCULAR SAW

Information: hand-held circular saws. Anchor the SIBUGLAS sheet to the work table by means of an aluminium lath and screw clamps. Cut with the hand-held circular saw using rapid advance and maximum rpm. The saw blade must not tilt (heat generation) and sheet wobble is to be avoided.

Saw blade. Use a blade with alternate chamfered teeth at spaces of approx. 10 mm irrespective of the saw blade diameter.

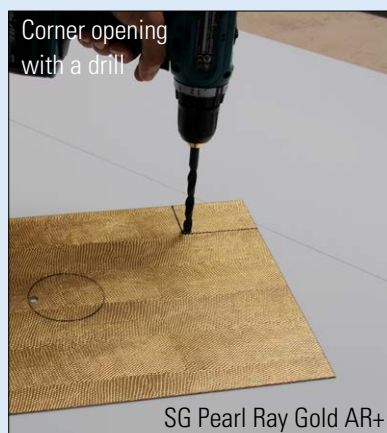
When processing SIBUGLAS sheets mechanically avoid heat by means of well-sharpened tools and rapid advance.

DRILLING

All apertures for armatures, shower rails, etc. and drillings must be completed prior to bonding onto the wall. The apertures and drill holes should be large enough to ensure the avoidance of contact between the SIBUGLAS sheets and the objects to be subsequently installed. Spaces of approx. 2-3 mm should be left all round. All drillings should be slightly countersunk and sharp cut edges broken. Rawl plugs should not be opened in the SIBUGLAS sheet and instead always be firmly anchored in the ground surface. Sharp tools must also be avoided.

The SIBUGLAS sheet should be positioned on a clean and stable wood underlay and then fixed using screw clamps and additional clean protection in the drilling area.

All the apertures in the sheet and the drillings in the wet area should be carefully sealed against moisture using SIBU SILICON 1.4 A. Wherever possible laser working is preferable. For the drill characteristics, please see page 07.



MILLING

Basically, all types of milling machines can be used, from simple hand-held devices to numerically controlled automats. In the case of millings with smaller diameters, a one- or two-edged finger milling cutter with good chip removal should always be utilised.

The choice of cutter is always oriented towards the respective task in hand, but whatever the case the following prerequisites must be fulfilled: free angle: 2° to 10°, rake angle 0° to 5°, cutting speed 200 to 4,500 m/min, advance 0.5 mm/rev.

During the cutting or milling of recesses or openings, the corners of the cut edges should always be pre-drilled. This prevents notch effects and thus the danger of sheet breakage. The drillings should have a diameter of approx. 10 mm. Wherever possible, laser working is preferable.

GROUND SURFACE

Existing tiles, plasterboard and smooth masonry.

ADHESIVE

SIBU SILICON 1.4 A

CLEANING/CARE

Warm water with washing-up liquid or oil-free benzine are suitable cleaning agents. Soiled cloths and abrasive cleaning agents are to be avoided. No razor blades, knives or scrapers should be used with SIBUGLAS AR+, as they can cause scratches and damage the abrasion-resistant coating.

Dry rubbing is to be avoided under all circumstances.

SIBUGLAS sheets may not be cleaned with alcohol or a solvent.

Direct spraying of the SIBUGLAS surfaces with water jets at over 45° C should be avoided.

INCOMPATIBLE SUBSTANCES - SIBUGLAS AR+

In accordance with the surface test for chemical impact pursuant to DIN EN 68 861-1 testing conditions.

During this test no changes were determined. The only exception: red wine, as after 24 hours the surface was slightly matt.



All sheet edges and apertures are to be grouted and fully sealed.

INSTALLATION INSTRUCTIONS

FOR THE WET ROOM AREA

SIBU
DESIGN

SIBU DESIGN GmbH & CoKG
Jupiterstraße 8 / 4452 Ternberg / Austria
Tel.: +43(0)7256.6025.0 / www.sibu.at

TOOL REQUIREMENTS

Tape measure, spirit level, jigsaw or hand-held circular saw, aluminium lath, screw clamps, battery screwdriver, keyhole saw, scraper, files, cloths, rubber roller, marker, work table, masking tape, ground cleaner, SIBU SILICON 1.4 A, or acetic acid free, neutral cross-linked silicone.

PREPARATIONS

Disassemble the sanitation systems such as taps, shower rails, etc. Measure the required sheet dimensions on the spot and take exact measurement of the openings for armatures or any other apertures that may exist. Then transfer the measurements to the SIBUGLAS structured sheets.



Clean the ground surface / degrease, mark the sheet position on the ground surface, mark vertically.



Cut the sheet to length using a jigsaw or a hand-held circular saw from the reverse side and with an underlay. Please see pages 7 and 18.



Subsequently deburr the cut edges using fine sandpaper, a file or scraper.



Apply silicone beads with a height of 3-4 mm at a distance of approx. 10 mm from the sheet edge. Leave a gap of approx. 60 cm between the beads.



Bring the sheet into position and press gently with a cloth.



Bring other sheets into position using a spacer (min. 3 mm).



Press down hard with a rubber roller, then remove the SIBUGLAS protective film in the edge area.



Mask the joint area with tape, point the sheet edges and all the apertures, and seal entirely. Smooth the joints using a finger.



Remove any dirt from the silicone immediately and then pull off the protective film.