TECHNICAL DATA SHEET
SYSTEXX Pure and Phantasy

Glass fibre wall coverings with either subtle or striking wall designs

Usage

The SYSTEXX Pure and Phantasy woven wall coverings are woven from glass yarns. Due to a vast variety of designs and the possible combination with highly varied coating systems, they offer a large number of surface finishes. SYSTEXX woven wall coverings are ideal wall coverings for the interiors of commercial and private buildings. Individual designs can be created by using suitable creative techniques.

Some of them combine the outstanding technical properties of glass fibre wall coverings with the economical and ecological advantages of Aqua Technology, i.e. the application of the postage stamp principle to wall coverings. It consists of a uniform layer of adhesive pre-applied to the back of the wall covering in the factory and activated by water. The adhesive complies with the same requirements as conventional dispersion adhesives but with one particular advantage – since the wall covering is pre-pasted with just the right amount of adhesive, there is no danger of missing areas or applying too much.

Properties

All SYSTEXX Pure and Phantasy wall coverings which are mentioned in the table in the attachment, are classified flame-retardant according to DIN EN 13501-1:2010 and fulfill the requirements of class B-s1, d0. Thanks to their high quality, they meet Oeko-Tex Standard 100. Due to their very low VOC emissions, these wall coverings achieve class A+ "d'émissions dans l'air intérieur". Furthermore, they are permeable to water vapor, wall reinforcing and crack bridging, extremely abrasion and scrub resistant, impact and perforation resistant, resistant to disinfectants and cleaning agents (in combination with corresponding coating systems). They are non-toxic and suitable for allergy sufferers. These SYSTEXX wall coverings are either applied using conventional wall adhesive techniques or quick and easy to hang thanks to Aqua Technology.

Technical date / roll dimensions

See Table in the attachment.

Substrate preparation

Substrates should be dry, clean, smooth and stable. Remove old wall coverings and unstable paints and finishes, sand down high-gloss paints to obtain a key and apply a suitable adhesion promoter. Sand down stable but rough/uneven substrates. Fill cracks/ holes with a levelling compound. The substrate must be prepared in such a way that the smallest unevenness are avoided, e.g. grains of sand, grain accumulations, etc. Processing marks may have a maximum width and height of 1 mm. If necessary, rework the surface over a large area with a smoothing plaster or in a smoothing step – Follow the plaster/filler manufacturer's instructions, especially with regard to primers. Unfilled, absorbent substrates are to be treated with a suitable primer. Remove any mold growth and treat in accordance with the relevant regulations.

More details are to be found in the table "Substrate / Preparation".

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Application

1.1. Without Aqua Technology – Application with adhesive

Apply sufficient latex adhesive with a paint roller or airless spray gun evenly to the wall over a width of 1 – 2 sheets. Observe the adhesive manufacturer's application notes. This also applies for application with a wall papering device. At normal room temperature/climate (18 °C, 60 %) the drying time is 12 – 24 hours. When applicating under extreme climatic conditions (high humidity, high temperatures), the duration can change significantly.

For adhesive consumption, please see the Table in the attachment.
Consumption quantity depends on the fabric structure and substrate.

Note especially with fine textures like Structure 129/138/139/188: Please pay attention to a constant adhesive application pattern, apply adhesive of approximately 120 g/m² (± 15%). If necessary, dilute the adhesive with 10 – 20 % water. When using a pasting machine, measure with a 0.30 feeler gauge.

1.2. With Aqua Technologie – Using the Aqua Quick pasting machine

With Aqua technology, the wall coverings come with a dry adhesive layer which is applied evenly to the back of the wall coverings. The adhesive layer is activated by water. Therefor, pull the roll correctly through the water-filled Aqua Quick pasting machine according to the instructions and fold loosely without creasing. It takes approximately 1 minute to activate the integrated adhesive, or 2 to 3 minutes when applying to ceilings. After activating the adhesive, process the wall coverings within a maximum of 20 minutes. When applicating under extreme climatic conditions (high humidity, high temperatures), the duration can change significantly.

Make corrections within a maximum of 10 minutes after application to the surface. Depending on the surface and the ambient climate/temperature, the duration can change significantly.

Do not leave glassbased wall coverings immersed in water for more than 5 minutes as this may cause the adhesive to swell and liquefy. If the dwell time is longer, the optimum quantity and consistency of adhesive on the fabric can no longer be guaranteed.

Recommendation: If a break is desired between cutting two lengths: Pull the length 50 cm shorter than required through the Aqua Quick pasting machine, then cut the length at the rear edge of the tub and pull the rest through the water. (Example: Pull the length to 2.00 m and cut off at the rear edge of the tub = total length 2.50 m).

For more information, please refer to the Aqua Quick manual. The drying time is 12 – 24 hours at normal room climate/temperature (18 °C, 60 %).

2. Avoiding textural differences

Never paste the wall covering upside down or inside out. Some products have a handy mark on the back of the wall covering which serves as a guide. These marks are spaced at approximately 1 m intervals from one length to the next. **With straight match**: We weave an alignment guide into wall coverings with large-format repeated patterns to make it easier to align them: a yellow thread which is visible on both sides of the covering. When applying each consecutive length, simply make sure that the yellow thread is perfectly aligned with the yellow thread in the previous length. This ensures that the design is shown off to its full effect.

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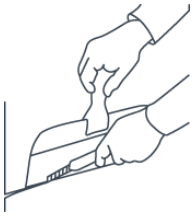
3. Butt-joining

Make sure that the edges butt up smoothly where one length joins another. Overlaps in the seam area must be avoided. Any adhesive left on the front of the fabric should be removed immediately with a damp clean cloth or sponge.

Recommendation: The SYSTEXX sponge ensures optimal seam correction. It can also be used to effectively remove adhesive from the visible side.

4. Pressing on and trimming



During application, use a (hard plastic) wallpaper spatula and press down firmly across the entire length, smoothing out any air bubbles. Carefully press overlapping fabric into the corners and cut sharp knife, using a wallpaper squeegee or cutting ruler as a guide, or just use wallpaper scissors.

Processing on outside corners: Gently sand the fabric with wet sand paper, (≥ P 240), then wrap it around the corner and cut or use a corner bead.

5. Coating

The use of a high-quality dispersion paint is recommended. All gloss levels can be used, but note that matt colors can affect the textural image.

Apply the paint evenly after the wall covering has completely dried. Follow the paint manufacturer's processing guidelines. The need for any additional coatings, which may only be applied after complete drying, depends on whether the product is pre-pigmented. Other influencing factors include, for example, the paint quality, the level of gloss, the color, the expected stress on the wall as well as the lighting situation and the desired result of the surface appearance. If fibers stand up after one coat, we recommend sanding them lightly between two coats. If resistance to disinfectants or decontamination of the surface is required, as well as for a satin or glossy coating, at least two coats are required. A test coating in advance is generally recommended.

The quantity depends on the paint and substrate as well as the level of gloss required and whether the surface is subject to heavy use. Determine exact values by means of a test application on the object. For further information, please refer to the technical data sheets of all products used.

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Important notes

1. Storage

Store the rolls in a dry, clean place, if possible wrapped in foil and closed, as well as frost-free and between 35 and 65% relative humidity.

2. Handling

Do not apply with room and surface temperatures below +8 °C. Always check to make sure that the serial numbers are the same when applying the wall covering to adjacent areas (see information on outside of box or roll inlay). One drop = wall/ceiling height plus 5 – 10 cm. Trim off the excess neatly.

3. General information

a) Despite strict quality controls, occasional production-related defects may occur. These are indicated at the edge of the product and compensated for by adding an additional length. Complaints made after more than 10 drops have been hung cannot be accepted.

b) The use of glass fibers can irritate the upper layers of the skin, which can lead to irritation in sensitive people. Allergy-causing or even questionable substances are not used, which is confirmed by the Oeko-Tex certification.

c) Due to the manufacturing process of the weft, there are visually recognizable irregularities in the surface appearance of the fabrics. However, this deliberately created textile look is no reason for complaint.

d) Since wallcovered surfaces depict a craftsmanship, completely homogeneous surfaces without small irregularities cannot be achieved. A visual perception of the wallcovering sheets and seams is product-specific and unavoidable. Also, "invisible" seams are not feasible from all conceivable angles. The assessment after application has to be carried out under customary conditions, in particular in daylight and normal ceiling/room lighting perpendicular to the surface while maintaining a normal viewing distance and viewing angle. For the assessment, artificial lighting to make minor irregularities visible are just as inadmissible as the evaluation in grazing light conditions that only occur at certain times of the day or the use of aids such as magnifying glasses.

e) If light effects (e.g. grazing light) might influence the appearance of the finished surface, undesirable effects (e.g. changing shades on the surface) should be largely avoided. They cannot be completely ruled out, as light influences vary a lot and cannot be clearly detected and evaluated (e.g. in natural light). In principle, the lighting conditions, as they are intended for later use, must be known and should already be present at the time of the application. Before application, an assessment of possible undesirable effects should be made. In addition, the limits of craftsmanship on the construction site must be taken into account. Wallcovered surfaces which appear absolutely flat and shadow-free even under the influence of grazing light are not executable.

f) This information sheet replaces all previously issued ones. It does not claim to address every problem that may occur in practice. Therefore no obligation or liability may be derived from it. Users are obliged to use their professional judgment to assess the application based on the product's suitability and the substrate. Please comply with the relevant national building regulations. In case of doubt, please contact the technical advisory service at Vitrulan Textile Glass GmbH.

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Table: Technical data / roll dimensions

Product	**SAP Designation**	approx. **Weight** in g/m²	approx. **Width** in cm	**Length** in m	**Pattern repeat**	**Adhesive consumption** pro m²** Min. ml	Max. ml
Pure Structure 103 PG AQ	GG 103 PG AQ	195	100	50	→|0 free match	-	-
Pure Structure 103 RW	GG 103 RW	155	100	50	→|0 free match	150	250
Pure Structure 108 PG	GG 108 PG	180	100	25	→|0 free match	150	250
Pure Structure 108 RW	GG 108 RW	170	100	50	→|0 free match	150	250
Pure Structure 109 PG	GG 109 PG	160	100	50	→|0 free match	150	250
Pure Structure 109 RW	GG 109 RW	145	100	50	→|0 free match	150	250
Pure Structure 111 PG	GG 111 PG	215	100	25	→|0 free match	180	300
Pure Structure 114 RW	GG 114 RW	200	100	25	→|0 free match	180	300
Pure Structure 116 PG	GG 116 PG	255	100	25	→|0 free match	180	300
Pure Structure 116 RW	GG 116 RW	235	100	25	→|0 free match	180	300
Pure Structure 117 RW	GG 117 RW	215	100	25	→|0 free match	180	300
Pure Structure 126 RW	GG 126 RW	165	100	50	→|0 free match	150	250
Pure Structure 129 PG	GG 129 PG	130	100	50	→|0 free match	100	150
Pure Structure 129 PG AQ	GG 129 PG AQ	165	100	50	→|0 free match	-	-
Pure Structure 129 RW	GG 129_2 RW	125	100	50	→|0 free match	100	150
Pure Structure 131 PG	GG 131 PG	125	100	50	→|0 free match	100	150
Pure Structure 131 RW	GG 131 RW	115	100	50	→|0 free match	100	150
Pure Structure 132 RW	GG 132 RW	125	100	50	→|0 free match	100	150
Pure Structure 133 PG	GG 133 PG	145	100	50	→|0 free match	100	150
Pure Structure 133 PG AQ	GG 133 PG AQ	185	100	50	→|0 free match	-	-
Pure Structure 135 PG	GG 135 PG	175	100	50	→|0 free match	130	200
Pure Structure 135 PG AQ	GG 135 PG AQ	215	100	25	→|0 free match	-	-
Pure Structure 135 RW	GG 135 RW	155	100	50	→|0 free match	130	200
Pure Structure 138 PG	GG 138 PG	130	100	50	→|0 free match	100	150
Pure Structure 138 RW	GG 138 RW	120	100	50	→|0 free match	100	150
Pure Structure 139 PG	GG 139 PG	140	100	50	→|0 free match	100	150
Pure Structure 139 PG AQ	GG 139 PG AQ	170	100	50	→|0 free match	-	-
Pure Structure 139 RW	GG 139 RW	130	100	50	→|0 free match	100	150
Pure Structure 145 RW	GG 145 RW	120	100	50	→|0 free match	100	150

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Product	SAP Designation	approx. Weight in g/m²	approx. Width in cm	Length in m	Pattern repeat	Adhesive consumption** pro m² Min. ml	Max. ml
Pure Structure 146 RW	GG 146 RW	160	100	50	→|0 free match	130	200
Pure Structure 150 PG	GG 150 PG	155	100	50	→|0 free match	130	150
Pure Structure 150 PG AQ	GG 150 PG AQ	200	100	25	→|0 free match	-	-
Pure Structure 150 RW	GG 150 RW	145	100	50	→|0 free match	130	150
Pure Structure 152 PG	GG 152 PG	205	100	25	→|0 free match	150	250
Pure Structure 152 RW	GG 152 RW	180	100	25	→|0 free match	150	250
Pure Structure 154 RW	GG 154 RW	180	100	50	→|0 free match	150	250
Pure Structure 158 RW	GG 158 RW	190	100	25	→|0 free match	150	250
Pure Structure 162 RW	GG 162 RW	190	100	25	→|← straight match 7,5*	150	250
Pure Structure 164 RW	GG 164 RW	150	100	50	→|0 free match	100	150
Pure Structure 165 PG	GG 165 PG	170	100	50	→|0 free match	130	200
Pure Structure 165 PG AQ	GG 165 PG AQ	195	100	50	→|0 free match	-	-
Pure Structure 165 RW	GG 165 RW	165	100	50	→|0 free match	130	200
Pure Structure 182 PG AQ	GG 182 PG AQ	250	100	25	→|0 free match	-	-
Pure Structure 188 PG	GG 188 PG	150	100	50	→|0 ansatzfrei	100	150
Pure Structure 192 RW	GG 192 RW	95	100	50	→|0 free match	100	100
Pure Structure 510 RW	GG 510 RW	90	100	50	→|0 ansatzfrei	100	150
Pure Lines 901 RW	GG 901 RW	280	100	25	→|0 free match	150	300
Phantasy Labyrinth 902 RW	GG 902 RW	280	100	25	→|0 free match	150	300
Pure Jute 904 RW	GG 904 RW	280	100	25	→|0 free match	150	300
Pure Jute 904 RW AQ	GG 904 RW AQ	320	100	25	→|0 free match	-	-
Pure Rain 905 RW	GG 905 RW	280	100	25	→|0 free match	150	300
Pure Big Stripes 906 RW	GG 906 RW	280	100	25	→|0 free match	150	300
Pure Mixed Stripes 907 RW	GG 907 RW	280	100	25	→|0 free match	150	300
Phantasy Waterfall 908 RW	GG 908 RW	280	100	25	→|0 free match or 32	150	300
Phantasy Snowflakes 911 RW	GG 911 RW	280	100	25	→|← straight match 12,8	150	300
Phantasy Metal Plate 913 RW	GG 913 RW	280	100	25	→|← straight match 20	150	300
Pure Small Stripes 925 RW	GG 925 RW	280	100	25	→|0 free match	150	300
Pure Small Stripes 925 RW AQ	GG 925 RW AQ	320	100	25	→|0 free match	-	-
Phantasy Bamboo 950 RW	GG 950 RW	200	100	25	→|← straight match 32	150	250

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Product	SAP Designation	approx. Weight in g/m²	approx. Width in cm	Length in m	Pattern repeat	Adhesive consumption** pro m² Min. ml	Max. ml
Pure Silk 960 RW	GG 960 RW	200	100	25	→|0 free match	150	250
Pure Silk 960 RW AQ	GG 960 RW AQ	225	100	25	→|0 free match	-	-
Phantasy Diamond Dust 972 RW	GG 972 RW	200	100	25	→|← straight match 25	150	250
Phantasy Diamond Dust 972 RW AQ	GG 972 RW AQ	225	100	25 & 12,5	→|← straight match 25	-	-
Phantasy Stardust 973 RW	GG 973 RW	200	100	25	→|← straight match 100	150	250
Phantasy Stardust 973 RW AQ	GG 973 RW AQ	225	100	25 & 12,5	→|← straight match 100	-	-
Pure Dots 975 RW AQ	GG 975 RW AQ	225	100	25	→|← straight match 1,6	-	-
Phantasy Icecubes 977 RW	GG 977 RW	200	100	25	→|0 free match	150	250
Phantasy Icecubes 977 RW AQ	GG 977 RW AQ	225	100	25 & 12,5	→|0 free match	-	-
Phantasy Versailles 980 RW AQ	GG 980 RW AQ	225	100	25 & 12,5	→|← straight match 50,8	-	-
Phantasy Tea Time 981 RW	GG 981 RW	200	100	25	→|← straight match 46	150	250
Phantasy Orient 982 RW AQ	GG 982 RW AQ	225	100	25 & 12,5	→|← straight match 28,4	-	-
Phantasy Desert 983 RW AQ	GG 983 RW AQ	225	100	25 & 12,5	→|← straight match 34*	-	-
Phantasy Stars 984 RW AQ	GG 984 RW AQ	225	100	25 & 12,5	→|← straight match 32	-	-
Phantasy Indian Summer 985 RW	GG 985 RW	200	100	25	→|← straight match 60*	150	250
Phantasy Retro 986 RW	GG 986 RW	200	100	25	→|← straight match 81,2	150	250

* The weave's thread path may vary by up to 3.5 threads per fabric length in the event of a straight pattern match. If necessary, align each length individually and ignore the alignment guide.

** Non-binding recommendation. See also section 1.1.

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General overview of substrate preparation

Substrate	Preparation
Exposed concrete	1. De-burr roughly 2. Fill holes and cracks sufficiently 3. Sand and prime according to filler/plaster manufacturer's instructions
Poured concrete, filigree concrete	1. Clean (abrade and smooth down) 2. Fill holes and cracks, smooth and level with a suitable filling material 3. Cover and smooth the entire surface 4. Sand and prime according to filler/plaster manufacturer's instructions
Sanding plaster	1. Sand down (remove loose sand) 2. Stabilize substrate with a suitable primer 3. Fill holes and cracks, smooth and level with a suitable filling material 4. Sand and prime according to filler/plaster manufacturer's instructions
Course textured plaster	1. De-burr roughly 2. Fill holes and cracks, smooth and level with a suitable filling material 3. Sand and prime according to filler/plaster manufacturer's instructions
Very absorbent plaster (e.g. gypsum plaster)	1. If necessary, skim the entire surface and smooth off 2. Sand and prime according to filler/plaster manufacturer's instructions
Standard plaster	1. Fill holes and cracks, smooth and level with a suitable filling material 2. Sand and prime according to filler/plaster manufacturer's instructions
Lining paper, size or sealer	1. Dampen the lining paper, size, or sealer to loosen it 2. Scrape it off 3. If necessary, skim the entire surface and smooth off 4. Sand and prime according to filler/plaster manufacturer's instructions
Peelable / stripable wallpaper **Scrap wallpaper** (e.g. cellulose)	1. Remove wallpaper entirely 2. Fill holes and cracks, smooth and level with a suitable filling material 3. Sand and prime according to filler/plaster manufacturer's instructions
Peeling / Flaking paint coating	1. Remove all loose flakes 2. If necessary, prime the surface 3. Fill holes and cracks, smooth and level with a suitable filling material 4. Sand and prime according to filler/plaster manufacturer's instructions
Distemper coatings	1. Remove completely by scraping/washing off 2. Prime with suitable keying primer
Glossy paint coatings	1. Sand until there is a mat finish 2. If necessary, apply a keying primer
Glass fabric*	1. Clean (abrade and smooth down)

* otherwise, an unclean structural image is created which becomes extremely disturbing after coating

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	2. Smoothen and level out fabric structure with a suitable filling material (prevents the formation of stripes in the texture) 3. Sand and prime according to filler/plaster manufacturer's instructions
Plasterboard panels	
	1. Fill joints and screw holes until even surface in accordance with current plasterboard specifications 2. Sand and prime according to filler/plaster manufacturer's instructions
OSB panels, wood, Hardboard	
	1. Apply a protective layer (to prevent carry-over of constituents) 2. Sand 3. Fill joints and screw holes with suitable filling material 4. Fill and level whole surface with a suitable filling material 5. Sand and prime according to filler/plaster manufacturer's instructions
Ceramic tiles	
	1. Clean and degrease the tiles 2. Apply bonding agent (undercoat/primer for ceramic and glass) 3. Fill and level whole surface with a suitable filling material 4. Sand and prime according to filler/plaster manufacturer's instructions
Rusty steel surfaces	
	1. Remove rust as per DIN 55928 PST 2-3 or ST 2-3 2. Apply a suitable anti-corrosive primer 3. Fill joints with suitable (2-K) filling material 4. Sand and prime (rust protection)
Bleeding surfaces (e.g. waterstains)	1. Insulate bleeding areas with a suitable primer 2. Sand 2. Fill holes and cracks, smooth and level with a suitable filling material 3. Sand and prime according to filler/plaster manufacturer's instructions
Nicotine and soot deposits	
	Treat with an insulating protective layer

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