

# TECHNICAL DATA SHEET

## SYSTEXX Pure Fleece

Glass fleece for perfectly smooth walls and ceilings

### Usage

SYSTEXX Pure Fleece combines the outstanding technical properties of glassfibre wall coverings with the economical and ecological advantages of Aqua Technology. SYSTEXX Pure Fleece are ideal wall and ceiling coverings for the interiors of commercial and private buildings. Individual designs can be created by using suitable creative techniques.

Aqua Technology: Applying 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

Nonwovens made of glass yarns outperform those made of cellulose in many respects: They can be cut easily both wet and dry, even when cut freehand, without "picking". They do not shrink and do not expand.

SYSTEXX Pure Fleece wall coverings 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 Class 3. Due to their very low VOC emissions, these wall coverings achieve class A+ "d'émissions dans l'air intérieur". They are wall reinforcing and crack bridging according to crack category A.1 specified by data sheet BFS-Merkblatt Nr. 19. Furthermore, they are permeable to water vapor as well as, in combination with corresponding coating systems, abrasion and scrub resistant and resistant to disinfectants and cleaning agents. They are non-toxic and suitable for allergy sufferers. SYSTEXX Pure Fleece wall coverings are quick and easy to hang thanks to Aqua Technology.

### Technical data / roll dimensions

Product	SAP designation	approx. Weight in g/m <sup>2</sup>	approx. Width in cm	Length in m
Pure <b>Fleece V11</b>	GV OP 100 PG AQ	115	100	50
Pure <b>Fleece V14</b>	GV OP 130_2 PG AQ_2	140	100	30
Pure <b>Fleece V16</b>	GV OP 130_2 PG AQ	160	100	30
Pure <b>Fleece V22</b>	GV 200 PG AQ	220	100	30
Pure <b>Fleece V22</b>	GV 200 PG AQ	220	100	50

## 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. Pretreat absorbent substrates with a suitable primer. Remove any mold growth and treat in accordance with the relevant regulations.

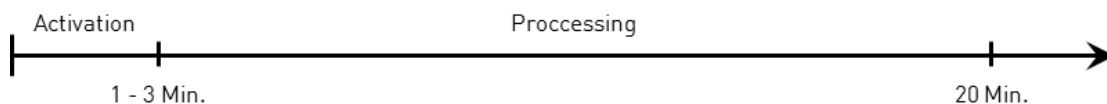
More details are to be found in the table "Substrate / Preparation".

## Application

### 1. Using the Aqua Quick pasting machine

**Note:** always use the red wiper pile when applying Glass fleece with the Aqua Quick machines I and III. It is included in the scope of delivery.

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. Therefore, 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 applying under extreme climatic conditions (high/low humidity/temperatures), the duration can change significantly. If necessary, a test application should be carried out on the object.



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.

### 3. Butt-joining / Double-cutting

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.

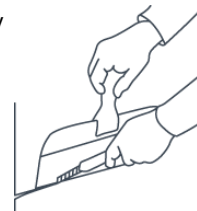
Recommendation: The SYSTEXX sponge ensures optimal seam correction. It can also be used to effectively remove adhesive from the visible side.

SYSTEXX Pure Fleece V16 is particularly repositionable and suitable for butt joints. All SYSTEXX Pure glass fleeces are ideal for **double cut seams**: Position the drop so that it overlaps the preceding drop by 3 to 5 cm, then cut through both drops from top to bottom with a sharp knife, taking care not to damage the substrate. Remove both strips and butt the cut edges up flush with one another. Any adhesive left on the front of the fabric should be removed immediately with a damp clean cloth or sponge.

Recommendation: The SYSTEXX double cut knife with footer is a professional tool and enables optimal double cut seams, especially on sensitive substrates.

### 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, ( $\geq$  P 240), then wrap it around the corner and cut or use a corner bead.

**Do not use a rubber spatula for fleeces below 200 g/m<sup>2</sup>**, otherwise an unclear structure could arise which becomes extremely annoying after the color coating is finished.

### 5. Coating

The use of a high-quality dispersion paint is recommended. All gloss levels can be used.

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.

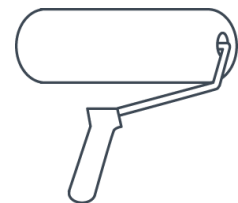


Table: Recommended coatings per product. Depending on the influencing factors mentioned above, an intermediate coating may not be necessary or additional intermediate coatings may be necessary.

Product	SAP designation	Base Coat	Intermediate Coat	Finishing Coat
Pure Fleece <b>V11</b>	GV OP 100 PG AQ		×	×
Pure Fleece <b>V14</b>	GV OP 130_2 PG AQ_2		×	×
Pure Fleece <b>V16</b>	GV OP 130_2 PG AQ		×	×
Pure Fleece <b>V22</b>	GV 200 PG AQ		×	×
Pure Fleece <b>V22</b>	GV 200 PG AQ		×	×

Paint 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.

## 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 0.5 m to the role 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) 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.
- d) 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.
- e) This information sheet 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.

## General overview of substrate preparation

Substrate	Preparation
<b>Exposed concrete</b>	<ol style="list-style-type: none"> <li>1. De-burr roughly</li> <li>2. Fill holes and cracks sufficiently</li> <li>3. Sand and prime according to filler/plaster manufacturer's instructions</li> </ol>
<b>Poured concrete, filigree concrete</b>	<ol style="list-style-type: none"> <li>1. Clean (abrade and smooth down)</li> <li>2. Fill holes and cracks, smooth and level with a suitable filling material</li> <li>3. Cover and smooth the entire surface</li> <li>4. Sand and prime according to filler/plaster manufacturer's instructions</li> </ol>
<b>Sanding plaster</b>	<ol style="list-style-type: none"> <li>1. Sand down (remove loose sand)</li> <li>2. Stabilize substrate with a suitable primer</li> <li>3. Fill holes and cracks, smooth and level with a suitable filling material</li> <li>4. Sand and prime according to filler/plaster manufacturer's instructions</li> </ol>
<b>Course textured plaster</b>	<ol style="list-style-type: none"> <li>1. De-burr roughly</li> <li>2. Fill holes and cracks, smooth and level with a suitable filling material</li> <li>3. Sand and prime according to filler/plaster manufacturer's instructions</li> </ol>
<b>Very absorbent plaster</b> (e.g. gypsum plaster)	<ol style="list-style-type: none"> <li>1. If necessary, skim the entire surface and smooth off</li> <li>2. Sand and prime according to filler/plaster manufacturer's instructions</li> </ol>
<b>Standard plaster</b>	<ol style="list-style-type: none"> <li>1. Fill holes and cracks, smooth and level with a suitable filling material</li> <li>2. Sand and prime according to filler/plaster manufacturer's instructions</li> </ol>
<b>Lining paper, size or sealer</b>	<ol style="list-style-type: none"> <li>1. Dampen the lining paper, size, or sealer to loosen it</li> <li>2. Scrape it off</li> <li>3. If necessary, skim the entire surface and smooth off</li> <li>4. Sand and prime according to filler/plaster manufacturer's instructions</li> </ol>
<b>Peelable / stripable wallpaper</b> <b>Scrap wallpaper</b> (e.g. cellulose)	<ol style="list-style-type: none"> <li>1. Remove wallpaper entirely</li> <li>2. Fill holes and cracks, smooth and level with a suitable filling material</li> <li>3. Sand and prime according to filler/plaster manufacturer's instructions</li> </ol>
<b>Peeling / Flaking paint coating</b>	<ol style="list-style-type: none"> <li>1. Remove all loose flakes</li> <li>2. If necessary, prime the surface</li> <li>3. Fill holes and cracks, smooth and level with a suitable filling material</li> <li>4. Sand and prime according to filler/plaster manufacturer's instructions</li> </ol>
<b>Distemper coatings</b>	<ol style="list-style-type: none"> <li>1. Remove completely by scraping/washing off</li> <li>2. Prime with suitable keying primer</li> </ol>
<b>Glossy paint coatings</b>	<ol style="list-style-type: none"> <li>1. Sand until there is a mat finish</li> <li>2. If necessary, apply a keying primer</li> </ol>
<b>Glass fabric<sup>1</sup></b>	<ol style="list-style-type: none"> <li>1. Clean (abrade and smooth down)</li> <li>2. Smoothen and level out fabric structure with a suitable filling material (prevents the formation of stripes in the texture)</li> <li>3. Sand and prime according to filler/plaster manufacturer's instructions</li> </ol>

<sup>1</sup> otherwise, an unclear structural image is created which becomes extremely disturbing after coating

<b>Plasterboard panels</b>	<ol style="list-style-type: none"> <li>1. Fill joints and screw holes until even surface in accordance with current plasterboard specifications</li> <li>2. Sand and prime according to filler/plaster manufacturer's instructions</li> </ol>
<b>OSB panels, wood, Hardboard</b>	<ol style="list-style-type: none"> <li>1. Apply a protective layer (to prevent carry-over of constituents)</li> <li>2. Sand</li> <li>3. Fill joints and screw holes with suitable filling material</li> <li>4. Fill and level whole surface with a suitable filling material</li> <li>5. Sand and prime according to filler/plaster manufacturer's instructions</li> </ol>
<b>Ceramic tiles</b>	<ol style="list-style-type: none"> <li>1. Clean and degrease the tiles</li> <li>2. Apply bonding agent (undercoat/primer for ceramic and glass)</li> <li>3. Fill and level whole surface with a suitable filling material</li> <li>4. Sand and prime according to filler/plaster manufacturer's instructions</li> </ol>
<b>Rusty steel surfaces</b>	<ol style="list-style-type: none"> <li>1. Remove rust as per DIN 55928 PST 2-3 or ST 2-3</li> <li>2. Apply a suitable anti-corrosive primer</li> <li>3. Fill joints with suitable (2-K) filling material</li> <li>4. Sand and prime (rust protection)</li> </ol>
<b>Bleeding surfaces</b> (e.g. waterstains)	<ol style="list-style-type: none"> <li>1. Insulate bleeding areas with a suitable primer</li> <li>2. Sand</li> <li>2. Fill holes and cracks, smooth and level with a suitable filling material</li> <li>3. Sand and prime according to filler/plaster manufacturer's instructions</li> </ol>
<b>Nicotine and soot deposits</b>	Treat with an insulating protective layer