

# TECHNICAL DATA SHEET SYSTEXX Premium

Innovative glass fabrics for walls and ceilings

#### **Properties**

The SYSTEXX Premium wall coverings are woven from glass yarns. The water activatable adhesive coating applied to the back gives them outstanding technical and ecological properties. SYSTEXX Premium wall coverings are extremely wear and abrasion resistant, making these highly durable glass fabrics suitable for the design of busy interior areas. Thanks to a special coating on the wall coverings, the application of a high-quality latex or synthetic dispersion paint suffices to achieve walls that are highly wear resistant.

All the SYSTEXX wall coverings have brand certification in accordance with DIN EN 13501-1:2007, and meet Class b-s1, d0. Thanks to its high quality, SYSTEXX Premium satisfies Oeko-Tex Class 1.



#### **FIREPROOF**

Class B-s1, d0

#### WALL REINFORCING AND CRACK BRIDGING



Crack bridging in accordance with class A5 crosswise (A4 lengthwise): 1.4 – 3 mm in plaster and drywall. Breaking load reinforcement at least 40% lengthwise (20% cross-wise)



#### **RESISTANT TO IMPACT AND PERFORATION**

At multiple impact to 20kN; maximum force of min. 200N in perforation test



#### **ABRASION AND SCOUR PROOF\***



Minimum 12.000 scrubbing cycles, in the abrasion test



#### **RESISTANT TO DISINFECTION AGENTS AND CLEANING\*\***

In accordance with the recommendations published by the Robert Koch Institute



#### WATER VAPORPERMEABLE

sd-value ≤ 0.20 m



## APPROVED AS SAFE UNDER HARMFUL SUBSTANCE AND FOOD LAWS



#### SUITABLE FOR ALLERGY SUFFERERS



#### NOT HARMFUL TO HEALTH

- \* Depending on coating (at least wet abrasion resistance class 3, DIN EN 13 300).
- \*\* Depending on interior wall paints suited for this (see data sheets of paint manufacturers).



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### **Typical application**

Due to the variety of designs and the possibility of the technical and aesthetic properties make SYSTEXX wallcoverings ideal for the interiors of commercial and private buildings. Individual designs can be created by using suitable creative techniques. Thanks to its highly durable special finish, this wall covering is perfect for use in hospitals, catering facilities, airports and in any busy area.

#### **Technical Parameters / Roll Style**

Product	Approx. Weight in g / m <sup>2</sup>	Approx. Width In cm	<b>Lengths</b> In m	Pattern Repeat cm
SYSTEXX Premium <b>004</b>	370	100	25	-→ ←- straight match 20
SYSTEXX Premium 013	370	100	25	$-\rightarrow$   $\leftarrow$ - straight match 20
SYSTEXX Premium <b>047</b>	265	100	25	$-\rightarrow$ I $\leftarrow$ - straight match 16
SYSTEXX Premium 049	265	100	25	-→l←- straight match 32
SYSTEXX Premium <b>050</b>	265	100	25	-→ ←- straight match 32
SYSTEXX Premium <b>051</b>	265	100	25	$\rightarrow$   $\leftarrow$ - straight match 64
SYSTEXX Premium <b>053</b>	265	100	25	$\rightarrow$   $\leftarrow$ - straight match 32
SYSTEXX Premium <b>060</b>	265	100	25	-→ 0 free match
SYSTEXX Premium 071	265	100	25	$-\rightarrow$   $\leftarrow$ - straight match 22,4
SYSTEXX Premium <b>072</b>	270	100	25	$\rightarrow$   $\leftarrow$ - straight match 24,8
SYSTEXX Premium 073	270	100	25	$\rightarrow$   $\leftarrow$ - straight match 100
SYSTEXX Premium 074	265	100	25	$\rightarrow$   $\leftarrow$ - straight match 24,4
SYSTEXX Premium <b>075</b>	270	100	25	$\rightarrow$   $\leftarrow$ - straight match 19,2
SYSTEXX Premium <b>077</b>	265	100	25	-→IO free match



#### **Application**

Important for all products

Do not apply when the temperature of the room or wall is less than +8 °C. Only use products with the same serial number on adjacent surfaces (printed on the outside of the box). Sheet length = all / ceiling measurement plus 5 – 10 cm. Cut off the excess cleanly.

#### 1. Application with the Aqua-Quick machine

Pull the material through the Aqua Quick machine, and fold together in loops. The integrated adhesive becomes active within approximately 1 minute, while 2-3 minutes of activation time are necessary for ceiling application. See the Aqua Quick instructions for further information. At normal room temperature (18 °C) the drying time is 7-12 hours.

After the adhesive has been activated, you have about 30 minutes to apply the fabric. Extreme climatic conditions (high humidity, high temperatures, may influence this time frame significantly.

During the bonding time of about 20 minutes, it is possible to correct the position of the applied length. This time frame is, however, subject to the substrate and ambient temperature. The material must not stay in the water for more than 5 minutes. While the fabric soaks in the water, the adhesive starts to swell and liquidifies. If the recommended soaking time is exceeded, we can no longer guarantee the optimal amount or perfect texture of the adhesive.

**Tip:** If you need more time between the cutting of two lengths:

Pull the length 50 cm shorter than required through the Aqua Quick machine. Then cut the length before the water bath. (Example: room height 2.50m. Pull 2.0m through the machine and cut before the water bath. This way you arrive at exactly 2.50m wall height).

#### 2. Avoid differences in texture

Make sure the pattern is the right way up when applying the product. The marking on the back provides orientation. When applied to the wall, the distance between the two markings should always be 1m.

#### 3. Paste with butt-join

The sheets must have very good contact near the seams.

Any adhesive left on the front of the fabric should be removed immediately with a damp clean cloth.

#### 4. Press on and cut off

Apply enough pressure with a wallpapering squeegee over the whole area to remove bubbles. Gently press excess material into the corner and cut along the spatula cutting ruler with a sharp cutter. Cut along inside and outside corners. Due to the special coating of the fabric, it is very elastic and can spring back easily. Therefore, to prevent the fabric from not bonding properly (and bubbles forming) it is best to avoid wallpapering around inside or outside corners.



#### 5. Coating

It is recommended a high-quality latex paint of at least wet abrasion class two or higher be used. Make sure to paint the wall or ceiling twice and apply the second coat only after the first coat has fully dried. Paint of all gloss levels can be used.

1st coat: apply the paint evenly after the product has fully dried. Follow the paint

manufacturer's application instructions.

2nd coat: only do this after the 1st coat of paint has fully dried.

Paint consumption: 300 - 400 g / m<sup>2</sup> for 2 coats

The quantity required depends on the fabric structure and on the substrate. You will need to determine accurate values to allocate applications to the building. Similarly, please also see the technical data sheets for those products that will also be used.

#### Coating according to degree of gloss

Desired topcoat	Required basecoat		
Matt			
<b>Semi-gloss</b> - Eggshell - Satin	<b>Semi-gloss</b> - Eggshell - Satin		
<b>Gloss</b> - High gloss	<b>Gloss</b> - Satin - High gloss		



#### 6. Substrate preparation

Make sure the substrate is clean prior to applying the first length. Even small particles such as sand grains may cause the formation of bubbles after the fabric has dried due to its outstanding wear resistance resulting in high surface tension. The substrate must be dry, clean, smooth and stable. Remove old wall coverings and unstable coatings. Smooth any stable substrates that are rough or uneven; fill any holes with filler. Ideally the substrate should be prepared in such a way that any imperfections such as extra graininess or small uneven locations can be avoided. Marks left by preparation work should be  $\leq 1$  mm. To achieve this, treat the surface with a smoothing plaster or smoothing pass over a large area. Porous substrates should first be treated with a suitable primer. Remove any mould or fungus, and treat as required by relevant guidelines (Details on the substrate pretreatment is provided in the next section).

Substrate	Preparation
Exposed concrete	<ol> <li>De-burr roughly</li> <li>Fill holes and cracks, smooth and level substrate with a suitable filling material</li> <li>Sand and prime</li> </ol>
Porous concrete, Filigran concrete	<ol> <li>Clean (abrade and smooth down)</li> <li>Fill holes and cracks, smooth and level substrate with a suitable filling material</li> <li>Sand and prime</li> </ol>
Sandy plaster	<ol> <li>Sand down (remove loose sand corn)</li> <li>Stabilize substrate with a suitable primer</li> <li>Fill holes and cracks, smooth and level substrate with a suitable filling material</li> <li>Sand and prime</li> </ol>
Course textured plaster	<ol> <li>De-burr roughly</li> <li>Fill holes and cracks, smooth and level substrate with a suitable filling material</li> <li>Sand and prime</li> </ol>
<b>Absorbent plaster</b> (e. g. stucco)	<ol> <li>Apply a suitable primer</li> <li>Fill holes and cracks, smooth and level substrate with a suitable filling material</li> <li>Sand and prime</li> </ol>
Normal plaster	<ol> <li>Fill holes and cracks, smooth and level substrate with a suitable filling material</li> <li>Sand and prime</li> </ol>
Peelable / Stripable wallpaper Scrap wallpaper (e.g. woodchip)	<ol> <li>Remove wallpaper entirely</li> <li>Fill holes and cracks, smooth and level substrate with a suitable filling material</li> <li>Sand and prime</li> </ol>
Peeling / Flaking paint coating	<ol> <li>Remove all loose flakes</li> <li>Sand and prime the area</li> <li>Fill holes and cracks, smooth and level substrate with a suitable filling material</li> <li>Sand and prime</li> </ol>

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#### Distemper coatings

(e.g. cellulose)

- 1. Remove completely by scraping/washing off
- 2. Prime with suitable keying primer
- 3. Fill holes and cracks, smooth and level substrate with a suitable filling material
- 4. Sand and prime

#### **Glossy paint coatings**

- 1. Sand until there is a matt finish
- 2. If necessary, apply a keying primer

#### Glass fabric

- 1. Smoothen and level out fabric structure with a suitable filling material (prevents the formation of stripes in the texture)
- 2. Sand and prime

#### **Plasterboard panels**

- 1. Fill joints and screw holes in accordance with current plasterboard specifications
- 2. Sand and prime

#### OSB panels, wood, Hardboard

- 1. Insulate/seal surface with suitable primer
- 2. Fill joints and screw holes with suitable filling material
- 3. Sand and prime

#### **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

#### **Rusty steel surfaces**

- 1. Remove rust as per DIN 55928 PST 2-3 or ST 2-3
- 2. Apply a suitable anti-corrosive primer

#### **Bleeding surfaces**

(e.g. waterstains)

- 1. Insulate bleeding areas with a suitable primer
- 2. Fill holes and cracks, smooth and level substrate with a suitable filling material
- 3. Sand and prime

#### Nicotine and soot deposits

1. Treat with an insulating protective layer

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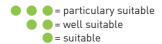


2-component paint

e.g. polyurethan or epoxy resin

					Stress level
SYSTEXX application areas	Premium*/ Active L65/ Active S38*/ Active SP38*	Comfort	Comfort V22	Active M39, M22	(Suitable coatings)
Commercial Premises e.g.	000	000		000	normal high-quality
Company buildings					dispersion paint
(office, airport, stadium, bank)					aleperelett pallit
Public buildings (administration,					high
social areas, exhibition areas)					Latex paint,
Gastronomy					pure acrylate paint
(hotel, restaurant, bar)					
Sales areas					
Playrooms and classrooms e.g.					high
					Latex paint,
Nursery and pre-school					pure acrylate paint
Educational institutions					extreme
schools, universities					Water-dilutable
					2-component paint
					e.g. polyurethan or epoxy resi
<u>Residential areas e.g.</u>					normal
					high-quality
Private apartments /					dispersion paint
rented apartments					
(living rooms, halls)					high
Social housing					Latex paint,
(stairwells)					pure acrylate paint
Wet rooms e.g.					high
Indoor swimming pools					Latex paint, pure acrylate paint
Wellness centres					pure acrytate paint
Private bathrooms					extreme
					Water-dilutable
					2-component paint
					e.g. polyurethan or epoxy resi
Hygiene rooms e.g.					normal
					high-quality
Doctors´ surgeries					dispersion paint
Hospitals					
(OP theatres, intensive areas)					high
Laboratories					Latex paint,
Retirement homes					pure acrylate paint
					extreme
					Water-dilutable
					2-component paint
					e.g. polyurethan or epoxy resi
Production rooms e.g.					high
					Latex paint,
Bakeries					pure acrylate paint
Abattoirs					•
Industrial kitchens					extreme
					Water-dilutable
					2 component point

<sup>\*</sup>We offer a 30-year warranty fo these products.



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#### **Guarantee**

SYSTEXX Premium and SYSTEXX Active S38 glass fabrics have been tested according to the TÜV quidelines and comply with the above mentioned properties.

SYSTEXX Premium and SYSTEXX Active S38 wall coverings are covered by a lifetime warranty of 30 years. You can learn more about this warranty at www.systexx.com.

#### **Important**

In spite of strict quality controls, the nature of production means that small faults can occur. These are marked at the edge of the material,

and compensated for by an additional 0.5 meter length. Complaints made after more than 10 sheets have been laid cannot be accepted.

#### **Storage**

Store the rolls in a dry, clean place.

#### **General notes**

- 1. Since this data sheet cannot deal with every possible problem that can occur in actual practice, liability cannot be assumed from it. In every case, the user is obliged to assess the application professionally in the light of the suitability of the product and of the substrate. Please observe applicable regional building codes. In case of doubt, the technical application consultation service of Vitrulan Textile Glass GmbH should be contacted.
- 2. Use of glass fibers can disturb the top layer of skin which can lead to irritations in sensitive people. Substances which can cause allergies or are even questionable are not used. This is confirmed for SYSTEXX by the Oeko-Tex certification as well as TÜV Nord's confirmation of its suitability for people who suffer from allergies.









The tested properties guarantee the high quality and technical performance of SYSTEXX Premium, Active S38 and SP38 glass fabric.



#### ABRASION AND SCOUR PROOF\* scrubbing cycles, in the abrasion test Minimum 4,000

Minimum 12,000



RESISTANT TO DISINFECTION AGENTS AND CLEANING\*\* In accordance with the recommendations published by the



APPROVED AS SAFE UNDER HARMFUL SUBSTANCE AND **FOOD LAWS** 



FIREPROOF Class B-s1, d0



WATER VAPOR PERMEABLE sd-value ≤ 0,14 m

 $R \le 0,20 \text{ m}$ 

Robert Koch Institute



SUITABLE FOR **ALLERGY SUFFERERS** 



#### WALL REINFORCING AND CRACK BRIDGING

Crack bridging in accordance with class A5 crosswise (A4 lengthwise): 1.4 - 3 mm in plaster and drywall. Breaking load reinforcement at least 40% lengthwise (20% crosswise).



#### RESISTANT TO IMPACT AND PERFORATION

At multiple impact to 20kN; maximum force of min. 200N in perforation test



NOT HARMFUL TO HEALTH



\* depending on the coating (min. wet-wiping resistance class. 3, DIN EN 13300)

\*\* depending on suitable interior wall paint (please refer to the data sheets provided by paint manufacturers)

Managing Director Sales / Marketing Vitrulan Textile Glass GmbH

Michael Gebhardt Managing Director Vitrulan Textile Glass GmbH

#### TERMS OF THE WARRANTY

- 1. The warranty is exclusively issued to the owner of the building object in which the product is used. If the owner of the building changes during the 30-year warranty period starting with the manufacturing of the product, the warranty is transferred to the new owner under the same expiration date as for the original owner and the warranty granted to the original owner is terminated at the same time. The guaranteed properties and conditions as above list are based on the state of scientific knowledge of the year 2009.
- 2. This warranty can only be claimed from the Vitrulan Textile Glass GmbH if the case was reported in writing and the Vitrulan Textile Glass GmbH is given the opportunity to inspect and examine the faulty place within a period of 3 weeks after the receipt of the claim in writing.
- 3. Since the warranty is a purely material warranty, the Vitrulan Textile Glass GmbH cannot be held responsible for the warranty when the product failure is not due to the properties of the product which were missing at the time of manufacture or were lost during the 30 year warranty period since manufacture. The Vitrulan Textile Glass GmbH cannot be made liable based on this warranty for a product failure which is caused by installation of the product not in accordance with manufacturer instructions, a planning error, a failure of the related substructure, sub soil movement, or an insurable risk such as fire, lightning strike, pipe water, explosions, implosions, storm (as defined by VGB, wind strength 8 or higher), hail or other uncontrollable natural forces which are insured by a building insurance policy based on the respective valid general residential building insurance conditions
- (VGB), or is due to deliberate damage or destruction of the product.
- **4.** In case of a warranty claim, the Vitrulan Textile Glass GmbH shall provide at its own cost the necessary replacement product for the product made by Vitrulan which has failed, in the required quantities needed for the restoration. The replacement product shall be delivered to the place of installation. Further restoration costs (such as mounting costs, costs for substructure renovation) and any subsequent costs shall not be covered by the Vitrulan Textile Glass GmbH.
- 5. The rights to which a consumer is entitled by law with respect to his contractual partner (later rectification, withdrawal, minimization, damage compensation) are not restricted by this warranty.