TECHNICAL DATA SHEET
SYSTEXX Active AcousTherm
Glassfibre wall covering optimizes room acoustics and saves energy

Usage

SYSTEXX Active AcousTherm wall covering is made from woven glass yarn. Thanks to a sound-absorbing acoustic fleece applied to the back of the fabric, it noticeably improves room acoustics and additionally conserves energy. This wall covering is ideally suited to large, lightly-furnished rooms or areas of heavy use with high noise levels such as canteens, restaurants, or hotel rooms.

Properties

Despite being just 3.0 mm thick, in its unpainted state SYSTEXX Active AcousTherm achieves an α_w value of 0.25 (H) and α_p value up to 0,7 in accordance with DIN EN ISO 354, which results in sound absorption class E.

SYSTEXX Active AcousTherm not only improves room acoustics, it also helps to conserve energy. At an average temperature of 10 °C the $\lambda(10)$ value is 0.040 [W/(m*K)], which means its thermal conductivity is equivalent to that of mineral wool. As a result, a comfortable temperature is reached more rapidly, which corresponds to a relative saving of 2 degrees.

SYSTEXX Active AcousTherm wall coverings are classified flame-retardant according to DIN EN 13501-1:2010 and fulfill the requirements of class B-s1, d0. Due to their very low VOC emissions, these wall coverings achieve class A+ "d'émissions dans l'air intérieur". Furthermore, they are 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).

Thanks to the special fleece applied to the back, they are also able to conceal small unevenness in the substrate of up to 2 mm – this saves time during substrate preparation. SYSTEXX Active AcousTherm glass fleece is applied using conventional wall adhesive techniques.

Technical data / roll dimensions

Product	SAP designation	approx. Weight in g/m²	approx. Width in cm	Length in m	Pattern repeat
SYSTEXX Active **AcousTherm 233**	GG 133 AC 10,4m	465	96	10,40	→|0 free
SYSTEXX Active **AcousTherm 233**	GG 133 AC 12,0m	465	96	12,00	→|0 free
SYSTEXX Active **AcousTherm 904**	GG 904 #S AC 10,4m	605	96	10,40	→|0 free
SYSTEXX Active **AcousTherm 904**	GG 904 #S AC 12,0m	605	96	12,00	→|0 free

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 unevennesses like grains of sand, grain accumulations, and processing marks have a maximum width and height of 2 mm. If necessary, rework the surface over a large area with a smoothing plaster or in a smoothing step. 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. 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. Not suitable for wall papering devices. 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.

SYSTEXX Active AcousTherm is not suitable for use in wet rooms!

Adhesive consumption: 350 – 500 g/m^2
The consumption quantity depends on the structure and substrate.

1.a Hanging on walls

Align the first drop vertically with the back of the fleece in contact with the adhesive and press firmly onto the wall with a spatula, applying enough pressure to avoid bubbles and creases. Trim off the excess with wallpaper scissors or a sharp knife. Hang the remaining drops, making sure that the edges butt up flush with one another. Avoid overlaps or a build-up of adhesive.
Ensure that neighboring drops are on the same level in the seam area: we recommend running a wallpaper spatula firmly down the seam from top to bottom to apply pressure evenly to both sides.
Important: Do not use a seam roller.
Any adjustments that may be needed should be carried out immediately after pasting. The substrate underneath the section that needs adjusting should be repasted with adhesive. Any adhesive left on the front of the fabric should be removed immediately with a damp clean cloth or sponge.

1.b Hanging on ceilings

Align the first drop vertically with the back of the fleece in contact with the adhesive and press firmly onto the ceiling with a spatula, applying enough pressure to avoid bubbles and creases. Hang the remaining drops, making sure that the edges butt up flush with one another (see 'Hanging on walls'). Please note that it is difficult to re-adjust coverings once they have been applied to ceilings and that any corrections should be carried out immediately after pasting. The substrate underneath the section that needs adjusting should be repasted with adhesive. Any adhesive left on the front of the fabric should be removed immediately with a damp clean cloth or sponge.

1.c Hanging on inside corners

Carefully press overlapping fabric into the corners and cut with a sharp knife, using a wallpaper squeegee or cutting ruler as a guide, or just use wallpaper scissors. Be sure to draw the knife along the outer edge of the spatula, cutting the sound-proof covering on the side nearest to the outer edge rather than on the inside.

1.d Hanging on outside corners

Fit a suitable corner bead, e.g. SYSTEXX product "Gewebe Abschlussprofil für Akustikgewebe" to create a tidy corner finish. Apply it and level it out with a filler before applying SYSTEXX Active AcousTherm to the wall.

2. Avoiding textural differences

Never paste the wall covering upside down or inside out. Important: Make sure that the thread path in the weave of each subsequent length lines up with the previous one at eye level.
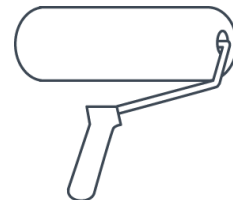
3. Coating

The use of a high-quality dispersion paint in wet-abrasion class II or above is recommended. All gloss levels can be used, but note that matt colors can affect the textural image. The use of a special acoustic paint is not necessary. The use of 2K coatings can affect the acoustic performance negatively.

In case of pre-pigmented products: depending on the requirements for the surface appearance, one coat of white or lightly tinted matt or semi-matt coatings is usually sufficient. However, an intermediate coating may be necessary depending on the colour, degree of gloss, light situation, stress on the surface and the requirements for the surface appearance. At least two coats are required if the surface is required to be resistant to disinfectants or to be able to be decontaminated, or if the coating has a satin or glossy finish. A test coating is recommended in advance.

| 1st coat: | Apply the coating evenly once the wall covering has completely dried. Follow the manufacturer's instructions. |
| 2nd coat: | Wait until the first coat is completely dry before applying the second coat. |

Recommended quantity: 250 – 300 g/m² for 1st coat, 150 – 220 g/m² for 2nd coat.

The quantity depends on the coating 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.

Recommended level of gloss: matt, eggshell

Paint application according to level of gloss

Desired top coat	Required base coat
Matt	**Matt**
Semi Gloss	**Semi Gloss**
- Matt-finish	- Matt-finish

Important notes

1. Storage

Store the rolls in a dry, clean place and, if possible, wrapped in foil and closed.

2. Handling

Do not apply with room and surface temperatures below +8 °C. Always check to make sure that the batch 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) 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 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

With SYSTEXX Active AcousTherm, Q2 is usually sufficient. Unevenness of up to 2 mm in height and width are concealed.

Substrate	Preparation
Exposed concrete	1. De-burr roughly 2. Fill holes and cracks sufficiently 3. Sand and prime
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
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
Course textured plaster	1. De-burr roughly 2. Fill holes and cracks, smooth and level with a suitable filling material 3. Sand and prime
Very absorbent plaster (e.g. gypsum plaster)	1. If necessary, skim the entire surface and smooth off 2. Sand and prime
Standard plaster	1. Fill holes and cracks, smooth and level with a suitable filling material 2. Sand and prime
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
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
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
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]	1. Clean (abrade and smooth down)
	2. Smoothen and level out fabric structure with a suitable filling material (prevents the formation of stripes in the texture)
	3. Sand and prime
Plasterboard panels	1. Fill joints and screw holes until even surface in accordance with current plasterboard specifications
	2. Sand and prime
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
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
	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
Nicotine and soot deposits	Treat with an insulating protective layer

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[1] otherwise, an unclean structural image is created which becomes extremely disturbing after coating