

TECHNICAL DATA SHEET

Pre-pigmented SYSTEXX Active AcousTherm 904 / 233

Energy-saving and sound-absorbing coverings for walls and ceilings

Properties / 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 combines the outstanding technical properties shared by all SYSTEXX products with an additional feature for special room requirements. SYSTEXX Active AcousTherm is a very hard-wearing, abrasion and scrub-resistant glass fabric which is ideal for interior decoration. This premium quality wall covering is specially designed to create a sound-absorbing room environment.

Despite being just 3.0 mm thick, in its unpainted state SYSTEXX Active AcousTherm achieves an α_w value of 0.25 (H) in accordance with DIN EN ISO 354, which puts it in sound absorption class E.

The special structure of SYSTEXX Active AcousTherm wall covering not only improves room acoustics, it also helps to conserve energy. At $\lambda(10) = 0.040$ [W/(m*K)], its thermal conductivity is equivalent to that of mineral wool. Heat dissipation is slowed down by reducing thermal bridges. As a result, a comfortable temperature is reached more rapidly, which corresponds to a relative saving of 2 degrees.

SYSTEXX Active AcousTherm awarded emissions class A+. All SYSTEXX wall coverings are fire-tested to DIN EN 13501-1:2010 and have a B-s1, d0 rating.

The sound-absorbing properties of SYSTEXX Active AcousTherm noticeably improve room acoustics. The inner insulating layer 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.

The easy-to-use wall covering with virtually invisible seams guarantees a flawless finish.

Technical data / roll dimensions

Product	SAP designation	Approx. weight in g/m ²	Approx. width. in cm	Length in m	Pattern repeat in cm
SYSTEXX Active AcousTherm 904	GG 904 #S AC 10,4m	600	96	10.40	--> 0 no matching required
SYSTEXX Active AcousTherm 904 Pre-pigmented	GG 904 #S AC 12,0m	600	96	12.00	--> 0 no matching required
SYSTEXX Active AcousTherm 233	GG 133 AC 10,4m	465	96	10.40	--> 0 no matching required
SYSTEXX Active AcousTherm 233 Pre-pigmented	GG 133 AC 12,0m	465	96	12.00	--> 0 no matching required

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. Fill cracks, holes and irregularities with a levelling compound.

Pretreat absorbent substrates with a suitable primer. Remove any mildew or mold growth and treat in accordance with the relevant regulations (Substrate preparation is described in more detail in the "Substrate / Preparation" table).

Application

Important for all products

Do not apply if the room and surface temperature is 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).

One drop = wall/ceiling length plus 5 – 10 cm. Trim off the excess.

1. Application

Substrate preparation: see "Substrate / Preparation".

Using a roller or airless sprayer, evenly apply a sufficient quantity of the textile dispersion adhesive to the substrate, covering an area the width of 1 - 2 drops. Not suitable for use with a wall papering device. Please follow the instructions provided by the adhesive manufacturer. Adhesive coverage: 350 g/m² to 500 g/m², depending on the condition of the substrate.

Allow 12 – 24 hours drying time under normal conditions (room temperature 18° C and relative humidity 60%).

Drying times may vary significantly when applying under extreme climatic conditions.

AcousTherm 233/904 is unfit for use in wet rooms!

1.a Hanging 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. It is important to ensure that the same amount of pressure is applied to both lengths of fabric 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. Do not use a seam roller.

Any adjustments that may be needed should be carried out immediately after pasting. We advise re-pasting the substrate underneath the section of wall covering that needs adjusting. Wipe off any adhesive that gets onto the outside of the fabric straightaway with a damp sponge.

1.b Hanging ceilings

Position the first length with the back of the fleece in contact with the adhesive and press firmly onto the ceiling, applying enough pressure to avoid bubbles and creases. Hang the remaining lengths, making sure that the edges butt up flush with one another (see 'Hanging walls'). Please note that it is difficult to readjust coverings once they have been applied to ceilings and that any corrections should be carried out immediately after pasting.

1.c Hanging internal corners

Cut the wall covering into internal corners using a glass fabric spatula and a sharp knife. 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 external corners

Wrap SYSTEXX Active AcousTherm around external corners, making sure the fabric runs around the corner by at least 10 cm. Press down firmly at the edges using a SYSTEXX wallpaper spatula to ensure a strong bond.

If desired, the length can be cut with a sharp knife at the outside corner, but since this leaves a rather unattractive, open edge even if the cut is very carefully executed, it should be avoided if possible.

Another option is to fit a suitable corner bead to create a tidy corner finish (available at Vitrulan). This must be applied to the corners and levelled out with a filler before pasting on the wall covering.

2. Avoiding textural differences

Do not paste the product upside down.

3. Painting

Any colored paint on the market can be used with SYSTEXX Active AcousTherm fabric. We recommend using a high-quality dispersion paint in wet-abrasion class II or above. AcousTherm 233 is already pre-pigmented: one coat of pale-colored matt, eggshell or satin paint is usually sufficient.

Recommended level of gloss: Matt, eggshell

1st coat: Apply the paint evenly once the wall covering has completely dried. Follow the paint manufacturer's instructions.

2nd coat: Wait until the first coat is completely dry before applying the second coat.

Coverage: 250 – 300 g/m² for the first coat of paint, 150 – 220 g/m² for the second coat.

Carry out a trial application to work out the precise rate. If using SYSTEXX Active AcousTherm with any other products, please follow the relevant accompanying instructions.

Paint application according to level of gloss

Desired top coat	Required base coat
Matt	-----
Semi-gloss - eggshell	Semi-gloss - eggshell

Substrate	Preparation
Exposed concrete	<ol style="list-style-type: none"> 1. Deburr roughly 2. Fill joints with a levelling compound to achieve a smooth finish 3. Sand and prime
Poured concrete, filigree concrete	<ol style="list-style-type: none"> 1. Clean (deburr if necessary) 2. Fill joints with a levelling compound to achieve a smooth finish 3. Sand and prime
Sanding plaster	<ol style="list-style-type: none"> 1. Remove loose plaster 2. Stabilize the plaster / apply a penetrating primer 3. Fill, level and smooth off if necessary, then prime 4. Sand and prime
Coarse textured plaster	<ol style="list-style-type: none"> 1. Clean and deburr 2. Skim the entire surface and smooth off 3. Sand and prime
Very absorbent plaster (e.g. gypsum plaster)	<ol style="list-style-type: none"> 1. Skim the entire surface if necessary and smooth off 2. Sand 3. Apply penetrating primer
Standard plaster	<ol style="list-style-type: none"> 1. Remove any sinter skin by sanding and fill with a levelling compound 2. Apply penetrating primer
Lining paper, size or sealer	<ol style="list-style-type: none"> 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 or dry-strippable wallpapers	<ol style="list-style-type: none"> 1. Completely remove the wallpaper 2. If necessary, skim the entire surface and smooth off 3. Sand and prime
Wallpaper residue (e.g. cellulose)	<ol style="list-style-type: none"> 1. Remove all wallpaper and paste residues 2. If necessary, skim the entire surface and smooth off or make good the damaged areas 3. Sand and prime
Flaking old paint	<ol style="list-style-type: none"> 1. Completely remove any unstable, flaking paint (by hand or with a machine) 2. Apply an intermediate primer if necessary. 3. If necessary, skim the entire surface and smooth off 4. Sand and prime
Distemper	<ol style="list-style-type: none"> 1. Remove completely by scraping/wiping 2. Prime
High gloss paints	<ol style="list-style-type: none"> 1. Rub down or wash with an alkaline cleaner to remove the glossy sheen 2. Apply synthetic resin dispersion (adhesion promoter) if necessary

Glass fabric*	<ol style="list-style-type: none">1. Clean and sand (apply adhesion promoter if necessary)2. Skim the entire surface and smooth off (If the surface is rough-textured, it may be necessary to repeat this several times)3. Sand and prime
Plasterboard	<ol style="list-style-type: none">1. Fill joints with a levelling compound to achieve a smooth finish2. Sand and prime
OSB, wood, fiberboard	<ol style="list-style-type: none">1. Apply a protective layer (to prevent carry-over of constituents)2. Sand3. Fill joints with a levelling compound to achieve a smooth surface finish4. Skim the entire surface and smooth off5. Sand and prime
Ceramic tiles	<ol style="list-style-type: none">1. Degrease and clean the tiles2. Apply an adhesion promoter, then skim the entire surface and smooth off3. Sand and prime
Rusty steel surfaces	<ol style="list-style-type: none">1. Remove rust (to standard ST 2 'Hand Tool Cleaning'): Remove all rust, scale, loose rust and loose paint by hand using a wire brush, sandpaper, grinding tools or by knocking and scraping, or a combination of the two methods2. Apply an anti-corrosion treatment3. Fill depressions and joint areas with a two-component filler to obtain a smooth finish4. Sand and apply anti-corrosion primer
Bleed-through (e.g. water stains)	<ol style="list-style-type: none">1. Test load-bearing capacity of substrate and apply protective layer2. Sand3. Skim the entire surface and smooth off4. Sand and prime
Nicotine and soot stains	<ol style="list-style-type: none">1. Apply protective layer/coating to isolate the stain

*) Otherwise you will be left with an uneven surface finish which will be extremely noticeable after painting!

Storage

Store rolls in a clean, dry place. Protect the edges of opened rolls from damage.

General information

- 1.) Certain sensitive individuals may find that handling glass fiber irritates their skin. SYSTEXX is tested to Öko-Tex standards to ensure that it is free from allergenic and harmful substances.
- 2.) The glass staple fiber yarns / Sliver is manufactured in such a way that irregularities are clearly visible in the surface pattern of fabrics made from it. This visual effect is deliberate and does not constitute grounds for complaint.
- 3.) 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.