

# TECHNICAL DATA SHEET

## modern walls harmony

Glassfibre wall covering for subtle wall designs

### Usage

The modern walls harmony 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. Individual designs can be created by using suitable creative techniques.

### Properties

All modern walls harmony 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 1. 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. modern walls harmony wall coverings are applied using conventional wall adhesive techniques.

### Technical data / roll dimensions

Product	SAP designation	approx.	approx.	Length in m	Pattern repeat
		Weight in g/m <sup>2</sup>	Width in cm		
harmony <b>structure 103</b>	GG 103 RW 50m	155	100	50	→ 0 free match
harmony <b>structure 108</b>	GG 108 RW 50m	167	100	50	→ 0 free match
harmony <b>structure 109</b>	GG 109 RW 50m	145	100	50	→ 0 free match
harmony <b>structure 114</b>	GG 114 RW 25m	200	100	25	→ 0 free match
harmony <b>structure 116</b>	GG 116 RW 25m	235	100	25	→ 0 free match
harmony <b>structure 117</b>	GG 117 RW 25m	215	100	25	→ 0 free match
harmony <b>structure 126</b>	GG 126 RW 50m	165	100	50	→ 0 free match
harmony <b>structure 129</b>	GG 129_2 RW 50m	125	100	50	→ 0 free match
harmony <b>structure 130</b>	GG 130 RW 50m	135	100	50	→ 0 free match
harmony <b>structure 131</b>	GG 131 RW 50m	115	100	50	→ 0 free match
harmony <b>structure 132</b>	GG 132 RW 50m	125	100	50	→ 0 free match
harmony <b>structure 135</b>	GG 135 RW 50m	155	100	50	→ 0 free match
harmony <b>structure 138</b>	GG 138 RW 50m	120	100	50	→ 0 free match
harmony <b>structure 139</b>	GG 139 RW 50m	130	100	50	→ 0 free match
harmony <b>structure 145</b>	GG 145 RW 50m	120	100	50	→ 0 free match
harmony <b>structure 146</b>	GG 146 RW 50m	160	100	50	→ 0 free match
harmony <b>structure 150</b>	GG 150 RW 50m	145	100	50	→ 0 free match
harmony <b>structure 152</b>	GG 152 RW 25m	180	100	25	→ 0 free match
harmony <b>structure 157</b>	GG 157 RW 25m	220	100	25	→ 0 free match
harmony <b>structure 158</b>	GG 158 RW 25m	190	100	25	→ 0 free match
harmony <b>structure 162*</b>	GG 162 RW 25m	190	100	25	→ ← straight match 7,5*
harmony <b>structure 164</b>	GG 164 RW 50m	150	100	50	→ 0 free match

<b>Product</b>	<b>SAP designation</b>	approx. <b>Weight</b> in g/m <sup>2</sup>	approx. <b>Width</b> in cm	<b>Length</b> in m	<b>Pattern repeat</b>
harmony <b>structure 165</b>	GG 165 RW 50m	165	100	50	→ 0 free match
harmony <b>structure 192</b>	GG 192 RW 50m	99	100	50	→ 0 free match
harmony <b>structure 204</b>	GG 165 PG 50m	170	100	50	→ 0 free match
harmony <b>structure 208</b>	GG 108 PG 25m	180	100	25	→ 0 free match
harmony <b>structure 209</b>	GG 109 PG 50m	160	100	50	→ 0 free match
harmony <b>structure 211</b>	GG 111 PG 25m	215	100	25	→ 0 free match
harmony <b>structure 216</b>	GG 116 PG 25m	255	100	25	→ 0 free match
harmony <b>structure 226</b>	GG 126 PG 50m	180	100	50	→ 0 free match
harmony <b>structure 229</b>	GG 129 PG 50m	130	100	50	→ 0 free match
harmony <b>structure 231</b>	GG 131 PG 50m	125	100	50	→ 0 free match
harmony <b>structure 233</b>	GG 133 PG 50m	145	100	50	→ 0 free match
harmony <b>structure 235</b>	GG 135 PG 50m	175	100	50	→ 0 free match
harmony <b>structure 238</b>	GG 138 PG 50m	130	100	50	→ 0 free match
harmony <b>structure 239</b>	GG 139 PG 50m	140	100	50	→ 0 free match
harmony <b>structure 250</b>	GG 150 PG 50m	155	100	50	→ 0 free match
harmony <b>structure 252</b>	GG 152 PG 25m	205	100	25	→ 0 free match
harmony <b>structure 264</b>	GG 164 PG 50m	160	100	50	→ 0 free match
harmony <b>lines 901</b>	GG 901 RW 25m	280	100	25	→ 0 free match
harmony <b>jute 904</b>	GG 904 RW 25m	280	100	25	→ 0 free match
harmony <b>rain 905</b>	GG 905 RW 25m	300	100	25	→ 0 free match
harmony <b>big stripes 906</b>	GG 906 RW 25m	280	100	25	→ 0 free match
harmony <b>mixed stripes 907</b>	GG 907 RW 25m	280	100	25	→ 0 free match
harmony <b>small stripes 925</b>	GG 925 RW 25m	280	100	25	→ 0 free match
harmony <b>structure silk 960</b>	GG 960 RW 25m	200	100	25	→ 0 free match

\* 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

## 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. 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. 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 applying under extreme climatic conditions (high humidity, high temperatures), the duration can change significantly.

Adhesive consumption:

harmony <b>structure 103 bis 264</b>	120 – 350 g/m <sup>2</sup>
harmony <b>structure 901 bis 960</b>	200 – 350 g/m <sup>2</sup>

Consumption quantity depends on the fabric structure and substrate.

**Especially with fine textures like harmony structure 129/138/139 and harmony structure 229/238/239:** Please pay attention to a constant adhesive application pattern, apply adhesive of approximately 120 g/m<sup>2</sup> (± 15%). If necessary, dilute the adhesive with 10 – 20 % water. When using a pasting machine, measure with a 0.30 feeler gauge.

### 2. Avoiding textural differences

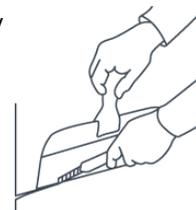
Never paste the wall covering upside down or inside out. Some products have a handy mark on the back of the wall covering which serves as a guide. These marks are spaced at approximately 1 m intervals from one length to the next. **With straight match:** We weave an alignment guide into wall coverings 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.

### 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.

### 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.

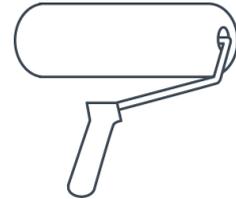
## 5. Coating

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.

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.

1<sup>st</sup> coat: Apply the coating evenly once the wall covering has completely dried. Follow the manufacturer's instructions.

2<sup>nd</sup> coat: Wait until the first coat is completely dry before applying the second coat.



Recommended quantity: 290 - 450 g/m<sup>2</sup> for two coatings.

The coating quantity depends on the paint and wallcovering 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.

### Paint application according to level of gloss

Desired top coat	Required base coat
<b>Matt</b>	<b>Matt</b>
<b>Semi Gloss</b>	<b>Semi Gloss</b>
- Matt-finish	- Matt-finish
- Satin-finish	- Satin-finish
<b>Gloss</b>	<b>Gloss</b>
- High gloss	- Satin
	- High gloss

## 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.

## 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</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</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</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</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</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</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</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</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</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. Apply a keying primer</li> </ol>
<b>Glass fabric*</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</li> </ol>

\* otherwise, an unclean 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</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</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</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> <li>5. Apply a keying primer</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>3. Fill holes and cracks, smooth and level with a suitable filling material</li> <li>4. Sand and prime</li> </ol>
<b>Nicotine and soot deposits</b>	<ol style="list-style-type: none"> <li>1. Treat with an insulating protective layer</li> <li>2. Apply a keying primer</li> </ol>