Product Data Sheet
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Sikagard Hygiene HD

Industrial Flooring

Sikagard Hygiene HD

Elastomeric Hybrid Acrylic Wall and Ceiling Coating

Description	Sikagard Hygiene HD is a seamless highly durable wall and ceiling system that can be installed with or without Reemat fiberglass reinforcement (Standard or Decorative). The Sikagard Hygiene HD system provides a high build, abuse resistant cleanable finish.
Where to Use	■ Pharmaceutical and cosmetic manufacturing facilities ■ Commercial kitchens ■ Food and beverage processing facilities ■ Health care facilities ■ Laboratories ■ Clean rooms and sterile environments
Advantages	■ Self protective against the growth of mold, bacteria, yeast, fungi, ecoli ■ Single component ■ Low odor ■ Suitable for hot water wash downs ■ Excellent impact resistance ■ Water vapor permeable ■ Seamless substrate movement ■ Excellent color stability
Chemical Resistance	Refer to the Chemical Resistance Guide of the top coat applied or consult Sika Technical Services at 800-933 SIKA (7452).

Typical Data

Chemical Base	Waterborne acrylic/polyurethane copolymer dispersion		
VOC Content	0.22 lb/gal. or 81.7 g/l		
Water Vapor Transmission	perms @ 4 mil DFT		
Fire Retardancy	Excellent resistance to surface spread of flame.		
Accelerated Weathering	ASTM G53-88- 5,000 hours Q.U.V. ('B' lamps) – no discoloration, chalking or crazing. Slight loss of gloss.		
Tensile Elongation	(BS EN ISO 527-3-Unreinforced)		
@ 24 hours - maximum stress (tensile load at break) = 6.8 N/mm² or 987 psi elongation at break = 110%			
@ 48 hours - maximum stress (tensile load at break) = 7.2 N/mm² or 1045 psi elongation at break = 87%			
@ 72 hours - maximum stress (tensile load at break) = 13.2 N/mm² or 1920 psi elongation at break = 50%			
Adhesion	**Coarse Concrete:**	261 psi	1.8 MPa (N/mm²)
	Smooth Concrete:	754 psi	5.2 MPa (N/mm²)
	Brick:	551 psi	3.8 MPa (N/mm²)
	Cement cladding board:	174 psi	1.2 MPa (N/mm²)
	Steel:	710 psi	4.9 MPa (N/mm²)
Tensile Strength	2326 psi (16 N/mm²) (BS EN ISO 527-3 – Unreinforced)		
Density	10.43 lbs per gallon (~1.26 kg/l) (DIN EN ISO 2811-1)		
Hardness (Persoz)	125		
Solids Content	49% by weight and 36% by volume.		
Gloss	>60 gloss units at 60 degree (Classified as "gloss" to BS EN 13300:2001)		
Opacity (Contrast Ratio)	>99.5% (130 micron film) (Classified as "Class 1" to BS EN 13300:2001)		
Resistance to QUV	No appreciable change other than a minor reduction in gloss. (ASTM G154-04:2500 hours QUV-B)		
Surface Granularity	<0.01 mm (Classified as "fine" to BS EN 13300:2001)		
Abrasion Resistance	113 mg weight loss (ASTM D 4060, CS10 Wheel, 1000 g load)		
Scratch Resistance	Short cure (overnight) – slight penetration at 2000 grams longer cure (7 days) – penetration at 3000 grams, surface marking evident.		
Packaging	5 gallon pails		
Shelf Life	24 months (when stored under the recommended conditions).		
Storage Conditions	50°F (10°C) to 90°F (32°C)		

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How to Use

Surface Preparation

All substrates must be sound, clean, dry and free from all contaminants and form release agents. Surface should be checked for soundness and any “hollow” areas should be removed. All depressions or spalled areas and cracks should be properly repaired with the appropriate Sika concrete repair & protection materials. For CMU and poured in place concrete walls that require a parge coat, use Sikagard 121 Plus or Sikagard EpoCem 75, consult data sheet for instructions. Adhere to preparation and application instructions of the repair product used. Existing coated surfaces should be mechanically abraded, remove loose unbonded coatings. A test patch needs to be completed to assure bond. Concrete - Should be cleaned and prepared to achieve a laitance and contaminant free, open textured surface by sand blasting, grinding or equivalent mechanical means. (CSP1-2 as per ICRI guidelines). Surfaces should be thoroughly vacuumed to remove surface dirt and dust. Surface and air temperature must be a minimum of 40°F - 90°F (4°C - 32°C) during installation and cure. Provide sufficient air movement to prevent condensation on surface during installation. After suitable preparation has been completed, mask all surfaces that require protection. If cove base is present, mask appropriately. Make certain all areas are covered that could be damaged by overspray for spray applications. For new drywall, CMU or poured-in-place concrete walls, all Sikagard Hygiene systems can be pre-primed as outlined below. **Important note: Pre-prime preparation materials must be pre-approved by Sika Flooring Technical Service.**

Primer

Substrate	Prep Material
- New drywall	Sika Bonding Primer, Bin Primer*†
- Concrete masonry unit (cmu)	SikaTop 121 Plus, Sikadur Injection Gel, Acrylic Block Filler†
- Poured-in-place concrete	Sika Bonding Primer†

* Ensure complete saturation of drywall substrate to minimize “soak in” of subsequent Sikagard Hygiene coatings.

† Consult Sika Technical Service for recommendations for block filler or for recommendations for previously coated substrates.

System Coverage

Sikagard Hygiene HD (Reinforced):

Primer: Refer to Primer section for specific application.

Body Coat and Saturant Coats: Roller apply 15 mils of Sikagard 203 W Steridex. Hang Reemat into wet Sikagard 203 W Steridex. Butt edges or overlap and double cut. Use a trowel, broad knife to remove any air pockets or bubbles.

Top Coat: Roller apply 11-15 mils of Sikagard 203 W Steridex. Optional topcoats include two 5 mil coats of Sikagard 307 W Sterisept or two 7 mil coats of Sikagard 205 W Sterisheen. Refer to specific TDS for application instructions.

Sikagard Hygiene HD (Unreinforced):

Primer: Refer to primer section for specific application.

Body Coat: Roller apply 11 mils of Sikagard 203 W Steridex.

Top Coat: Roller apply 11-15 mils of Sikagard 203 W Steridex. Optional topcoats include, two 5 mil coats of Sikagard 307 W Sterisept or two 7 mil coats of Sikagard 205 W Sterisheen. Refer to specific TDS for application instructions.

Mixing

Pre mix the Sika Bonding primer parts A and B separately using a drill (300-450 rpm) and jiffy blade for 2 minutes. Pre mix the Sikagard 203 W Steridex, Sikagard 205 W Sterisheen and the Sikagard 307 W Sterisept using a drill (300-450 rpm) and jiffy blade for 2 minutes.

Application

Sikagard 203 W Steridex, Sikagard 205 W Sterisheen and Sikagard 307 W Sterisept should be applied using a 1/4’’ - 3/8’’ nap roller. The Sikagard 205 W Sterisheen and the Sikagard 307 W Sterisept can be sprayed. Use airless spray equipment. For Sikagard 205 W Sterisheen use tip size .11 to .15 at a 60 degree angle. For Sikagard 307 W Sterisept use tip size of 0.28 to 0.48 mm (11 to 19 thou).

Cure Mechanism

At a temperature of 70°F (21.1°C), allow the systems to cure a minimum of 72 hours before returning to full service. When over coating adhere to critical recoat times.

Critical Recoat Time

Consult specific product data sheets for recoat times.

Tooling

Roller apply using a 1/4’’- 3/8’’ nap roller cover.

Limitations

- Do not apply near foodstuffs in unventilated conditions. Always ensure adequate ventilation.
- Do not thin or brush out like conventional paints (thinning for primer use is permissible).
- Do not apply the products below a minimum temperature of 40°F (4°C) or a maximum of 90°F (32°C) throughout the application period. Conditions must remain a minimum of 40°F (4°C) and 5°F (-15°C) above the dew point.
- Protect from frost, freezing and high heat (above 90°F {32°C}).
- Product is not suitable for open fibrous insulation.
- Sikagard 307 W Sterisept is normally intended to be used internally, however if used externally the natural weathering process of the material may cause slight darkening of the colors and progressive loss of gloss with time. All colors are intermixable.

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■ If there is any question as to whether or not the product will adhere to an existing coating or surface, a test patch should be applied and evaluated for compatibility and adhesion.

■ Application by roller may result in a slight surface texture when using standard coverage rates. If a smoother finish is required apply 3 thinner coats to achieve desired DFT. Previous coat must be completely dry prior to overcoating.

■ Ensure entire surface is fully dried before proceeding. Crazing may occur when overcoating undried surfaces or when material is applied in a heavy application.

■ Good ventilation is required for Sikagard 307 W Sterisept to dry properly.

■ Gloss is effected by humidity and temperature.

■ The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.

■ If additional heating is required, do not use gas, oil, paraffin or other fossil fuel heaters; these methods produce large quantities of carbon dioxide and water vapor, which may adversely affect the finish. Use only electric powered warm air blower systems.

■ New concrete should be allowed to cure/hydrate for a minimum of 10 days and preferably 28 days.

Caution	Sikagard 307 W Sterisept: **WARNING: IRRITANT.** Polyurethane (Mixture), Butyl Carbitol (CAS: 112-34-5) and N-methyl-2-pyrrolidone (CAS: 872-50-4). Causes eye/skin/respiratory irritation. Harmful if swallowed. **WARNING:** This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
First Aid	Sikagard 307 W Sterisept: **Eyes** – Hold eyelids apart and flush thoroughly with water for 15 minutes. **Skin** – Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. **Inhalation** – Remove to fresh air. **Ingestion** – Do not induce vomiting. Dilute with water. **Contact physician. In all cases contact a physician immediately if symptoms persist.**
Handling and Storage	Sikagard 307 W Sterisept: Avoid direct contact. Wear personal protective equipment (chemical resistant goggles/gloves/clothing) to prevent direct contact with skin and eyes. Use only in well ventilated areas. Open doors and windows during use.
Clean Up	Sikagard 307 W Sterisept: Use a properly fitted NIOSH respirator if ventilation is poor. Wash thoroughly with soap and water after use. Remove contaminated clothing and launder before reuse. Use personal protective equipment (chemical resistant gloves/ goggles/clothing). Without direct contact, sweep up spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable local, state, and federal regulations.
Additional Info	Technical Data Sheets are updated periodically. To ensure the most current version is being used, visit Technical Resources on www.sikafloorusa.com. Proper material application is the responsibility of the user. Site visits made by Sika personnel are for making technical recommendations only and not for supervising or providing quality control. Before applying for protection against specific chemical environments, consult Chemical Resistance Guide or Sika Technical Service. Previously applied finishes are subject to practical field evaluation to determine appropriate preparation, primers, etc. Masonry backings may require cement plaster finish if it is desirable to have the wall in perfect plane.

Visit our website at www.sikafloorusa.com **1-800-933-SIKA NATIONWIDE**

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