



KEYGLAS-VINYL ESTER LINING SYSTEM

DESCRIPTION

KEYGLAS-VINYL ESTER LINING is a fiberglass mat reinforced novolac vinyl ester lining system with silica fillers. This system is designed to provide a seamless floor to wall to ceiling surface that is easy to clean and maintain. Combining high impact and excellent acid and corrosion resistance, **KEYGLAS-VINYL ESTER LINING** is the ideal lining system for secondary containment, tank linings, exteriors of high temperature equipment, trenches, pits, and sumps. **KEYGLAS VINYL ESTER LINING** is a nominal 1/8 inch (125 mils) reinforced system consisting of a penetrating primer, 1/16 inch basecoat, a chopped mat or woven fiberglass and 1/16 inch topcoat.

The **KEYGLAS-VINYL ESTER LINING** system may also incorporate carbon filler for improved resistance to hot caustic and hydrofluoric acid type chemistries.

KEY ADVANTAGES

- Low permeability
- Excellent Acid & Corrosion Resistance
- High Heat & Impact Resistance (200°F wet, 300°F intermittent – dry)
- Seamless Surface Inhibits Bacteria Growth
- Easily Maintained
- Conductive version available

KEY CONSIDERATIONS

- Substrate temperature must be a minimum of 50°F.
- Substrate must be free of hydrostatic pressure, moisture transmission, paint, curing agents, and other foreign materials which can prevent proper bond.
- Substrate irregularities must be repaired prior to installation.
- Vinyl Ester resin has a characteristic styrene odor during application and cure. **KEYGLAS-VINYL ESTER LINING** should be applied in areas with proper ventilation.

APPLICATION

SURFACE PREPARATION

Surface Preparation is the most critical portion of any successful resinous flooring system application. All substrates must be properly prepared as outlined in **KEY RESIN COMPANY'S TECHNICAL BULLETIN #1**. Work must be performed by trained or experienced contractors or maintenance personnel. The **KEY RESIN COMPANY** service department is pleased to answer any questions.

INSTALLATION

KEYGLAS-VINYL ESTER LINING is installed over a concrete substrate. Fiberglass mat is imbedded into a troweled base of Key Vinyl Ester Resin. Successive applications of troweled finish coats are applied to ensure a smooth surface. For complete instructions, refer to the **KEYGLAS-VINYL ESTER LINING** installation guide available from your **KEY REPRESENTATIVE**.

CLEAN UP

Clean skin with soap and water. Tools and equipment should be cleaned with xylene or lacquer thinner.

COMPOSITION

KEYGLAS-VINYL ESTER LINING is a 100% solids vinyl ester-novolac wall/floor coating system reinforced with 1.5-5.0 ounce fiberglass mat reinforcement as the standard.

TECHNICAL DATA

Coating System Performance Properties

Flammability ASTM D-635	Self-Extinguishing over Concrete
Fungus & Bacteria Growth MIL-F-52505 §4.4.2.11	Will not support growth of fungus or bacteria when subjected to mildew and bacteria tests.
Hardness ASTM D-2240	85 Shore D
Bond Strength to Concrete ACI COMM #403, Bulletin 59-43	>350 psi (100% concrete failure)
Water Absorption ASTM D-570	0.10%
Abrasion Resistance ASTM D-6040	30 mg
Impact Resistance Gardner Impact Tester	>120 in/lbs
Tensile Strength ASTM C-307	3,000 psi
Thermal Coefficient of Expansion ASTM C-531	6-10 x 10 ⁻⁸ in./in./°F
Compressive Str.	12,500 psi

COLOR SELECTION

KEYGLAS-VINYL ESTER LINING is available in Standard Grey or Red. Custom colors are available subject to laboratory approvals, minimum quantities, lead time for production and increased cost.

TECHNICAL SERVICE

Key Resin Company and **KRC Associates, Inc.** provide services and consultations on material selection, specification, troubleshooting, and other information on the proper repair and protection of concrete surfaces. **KEY REPRESENTATIVES** are available to assist you. CALL (888)943-4532 or visit www.keyresin.com.

AVAILABILITY

Key Flooring and **Wall Systems** are available throughout the United States, Canada, and a number of other countries. Contact the **KEY REPRESENTATIVE** in your area for details.

MAINTENANCE

After completing the application of **KEYGLAS-VINYL ESTER LINING**, the installer should provide the owner with maintenance instructions. If floors become slippery due to animal fats, oil, grease, or soap film, clean and rinse thoroughly.

KEYGLAS-VINYL ESTER LINING is easily cleaned with neutral soaps or detergents. Routine mechanical scrubbing is recommended for all surfaces having a non-skid texture. Waxing is optional. Long periods of heavy traffic may cause wear patterns necessitating a maintenance application of a finish coat.

WARRANTY

Key Resin Company ("Key") warrants for a period of one (1) year that its products will be free of manufacturing defects and will be in conformity with published specifications when handled, stored, mixed and applied in accordance with recommendations of **Key**. If any product fails to meet this warranty, the liability of **Key** will be limited to replacement of any non-conforming material if notice of such non-conformity is given to **Key** within (1) one year of delivery of materials. **Key** may in its discretion refund the price received by **Key** in lieu of replacing the material. No customer, distributor, or representative of **Key** is authorized to change or modify the published specifications of this warranty in any way. No one is authorized to make oral warranties on behalf of **Key**. In order to obtain replacement or refund the customer must provide written notice containing full details of the non-conformity. **Key** reserves the right to inspect the non-conforming material prior to replacement. EXCEPT FOR THE EXPRESSED WARRANTY STATED ABOVE, THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE. **KEY'S OBLIGATION SHALL NOT EXTEND BEYOND THE OBLIGATIONS EXPRESSLY UNDERTAKEN ABOVE AND KEY SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO THE PURCHASER OR ANY THIRD PARTY FOR ANY LOSS, COST, EXPENSE, DAMAGE OR LIABILITY, WHETHER DIRECT OR INDIRECT, OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.**