

CCS™ STRIPSEAL™

INJECTION SEAL - NON-SAG POLYUREA CRACK SEALER FOR CONCRETE AND MASONRY SUBSTRATES

TECHNICAL DATA SHEET FOR PROFESSIONAL CONTRACTOR USE ONLY

DESCRIPTION

CCS™ StripSEAL™ is a two-component, non-sag, polyurea paste adhesive designed for sealing cracks and delaminations in concrete and masonry in preparation for epoxy pressure injection. It is applied to dry concrete or masonry substrates at 1/8 inch (125 mils 3.18 mm) without sagging and it cures quickly (even at colder temperatures). It is available in cartridges or bulk. After the injection resin fully cures, the CCS™ StripSEAL™ is removed by peeling it off. Eliminating the need for grinding it off, saving time and reducing the marring (concrete scarring) caused by grinding. It is ideal for sealing decorative concrete where grinding would mar the surface. It does cause the concrete substrate to look clean when it is removed. When maintaining the concrete's decorative appearance is vital, spray the surface to be sealed and the surrounding concrete surface with a 20% or 40% percent water-based silane penetrating sealer. It must be dry before applying CCS™ StripSEAL™. It contains no VOC's (volatile organic compounds).

FEATURES

CCS™ StripSEAL™ is a fast cure sealer with excellent handling characteristics formulated to cure over a wide range of substrate temperatures, which minimizes the interval between crack sealing and pressure injection grouting. Following initial cure of the injection resin, CCS™ StripSEAL™ crack sealer may be "stripped" from the surface of the repaired crack by pulling on tabs embedded in the seal at the time of application or by prying-up on a leading edge of the seal with a putty knife, margin trowel, or similar tool.

- Low odor prior to cure and may be considered for interior applications with adequate ventilation.
- Available in cartridges or bulk.
- Convenient 1:1 (by vol.) mixing ratio and is formulated for easy measuring, mixing, and application.
- For quality control, each component is a different color. When properly mixed the color will be a uniform concrete blue-gray.
- If not removed, the cured material will not be UV color stable with moderate discoloration and chalking when exposed to direct sunlight.

LIMITATIONS

The minimum substrate temperature for cure is 40°F (4.4°C).

- Do not apply to damp or wet substrates (dry surfaces only).
- Do not add solvents or otherwise thin this material.

PACKAGING & COLORS

Standard kit sizes of Part A + Part B: 2 gallons (7.57 l.) kits.
Cartridges are available.

SHELF LIFE

One year maximum in unopened, original containers when stored between 60°F and 90°F (15.6°C and 32.2°C) in a dry place away from sunlight. Remixing of components may be required upon long-term storage.

TECHNICAL DATA

7 days 73°F (23°C) unless otherwise indicated. Compressive strength of cement mortar 4,500 psi (13.0 MPa).

PHYSICAL PROPERTIES		TEST METHOD	VALUE
Mix Ratio by Volume			1:1
Mix Ratio by Weight			100:91
Color	Part A Part B Mixed	VISUAL	White Black Concrete Gray-Blue
Weight per Gallon	Part A Part B Mixed	ASTM D1475	9.4 lbs. (4.3 kg) 8.6 lbs. (3.7 kg) 9.0 lbs. (4.1 kg)
Viscosity	Part A Part B Mixed	ASTM D2393	3000 7000 5000
Non-Sag Thickness, Inches		ASTM D 2730	1/8 (2.175 mm)
Gel Time, 100 g	40° F (4°C) 73° F (23°C)	ASTM D 2471	9 minutes 4 minutes
Time to Develop Bond Strength Greater than 200 psi (1.4 MPa)	40° F (4°C) 73° F (23°C)	ASTM D7234	90 minutes 30 minutes
Bond Pull-Off Strength to Concrete, Strength Development Cure Time	30 Minute 60 Minutes 90 Minutes	ASTM D7234	200 psi (1.4 MPa) 350 psi (2.4 MPa) 400 psi (2.8 MPa)

CHEMICAL RESISTANCE

CCS™ StripSEAL™ has excellent resistance to a wide range of commonly encountered chemicals including acids and bases, aircraft and automotive fluids, petroleum fuels, cutting oils, etc. It has limited resistance to hydrocarbon solvents. Performance is a function of the specific chemical and concentration, ambient and solution temperatures, exposure times, and housekeeping procedures. For information on specific chemicals and exposure conditions, contact a ChemCo Systems Technical Representative.

SURFACE PREPARATION

Substrate surfaces must be dry or damp, sound and free of all bond-inhibiting substances for sealers used as epoxy dams. Prepare surfaces in accordance with ICRI (International Concrete Repair Institute) Guideline No. 310.2R Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair, Concrete Surface Profile, CSP 1 to CSP 4. The concrete surfaces should have a minimum strength of 250 psi (1.72 MPa) in direct tension per ASTM C1583 Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method). Steel surfaces should be cleaned to "white metal" according to SSPC-SP 5/NACE No.1 White Metal Blast Cleaning is a standard used for white metal blast cleaning put forth by the SSPC (Society for Protective Coatings) and NACE (National Association of Corrosion Engineers) international standard.

MIXING

CCS™ StripSEAL™ is a two-component product. The resin to hardener (Part A: Part B) mix ratio is 1:1, by volume. It is a short work life and fast-curing material; use quantities that can be applied before the working life of the mixed material expires. Wear safety glasses and clean neoprene rubber gloves when handling the material. Transfer the appropriate quantities of Part A and Part B onto a palette and manually mix with a margin trowel until streak-free and uniform in color. To mix larger quantities, combine Parts A and B and immediately begin mixing with a Jiffy mixer blade attached to a low speed (350 - 750 rpm) electric or pneumatic drill motor. Other tools such as paint sticks, spatulas, margin trowels, etc. may not provide adequate mixing in a short period of time. Mix thoroughly for approximately 30 seconds. Place the used mixing blade in solvent immediately after mixing. Transfer mixed material onto palettes. This extends working life by minimizing the build-up of mass related exothermic heat.

INSTALLING

For crack sealing, spread a thin layer (1/8 inch 125 mils 3.18 mm minimum) of material over the crack with a putty knife or margin trowel taking care not to force material into the crack. Immediately embed pull-tabs in the material. Tabs, approximately 1/2 inch (500 mils 12.7 mm) wide and several inches long may be made of any material that serves the purpose-cloth, duct tape, fiberglass mat, etc. Pull-tabs may be omitted in favor of prying loose the leading edge of the seal and peeling the material from the substrate. Allow for adequate cure of the polyurea seal before beginning pressure

injection grouting of epoxy adhesive (approx. 1 hour, 73°F (23°C), 3 hours, 40°F (4°C). The seal is sufficiently cured for pressure injection grouting when it resists indentation by finger pressure. (Note: Due to the material's reaction with atmospheric moisture, the surface cure of the applied seal is faster than the bulk cure. Absence of surface tackiness should not be used as an indicator of bulk cure.) Stripping the seal removes a thin layer of the substrate surface and leaves a slightly darkened surface. If desired, the roughened and darkened surface may be dressed by light sandblasting or grinding. Allow for adequate cure of the epoxy adhesive before removing the seal.

CLEAN-UP

All tools and equipment must be cleaned before the mixed material cures. Cleaning can be facilitated with a solvent such as acetone or heavy-duty detergents. Cured material may be removed from equipment and tools by soaking in an epoxy stripper.

SAFETY

This bulletin does not accompany the product when sold. For hazard warnings, safe handling, and first aid instructions, CAREFULLY READ THE SAFETY DATA SHEETS AND CONTAINER WARNING LABELS.

Part A: Liquid epoxy resin, HMIS Health Hazard Rating-2 (Moderate Hazard). Warning! Causes eye and skin irritation. May cause allergic skin reaction. Harmful if swallowed. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Avoid prolonged or repeated contact with skin.

Part B: Liquid amine hardener, HMIS Health Hazard Rating-2 (Moderate Hazard). Contains alkaline amines. Warning! Causes eye and skin irritation. May cause allergic skin and respiratory reaction. Corrosive, do not get in eyes or skin or on clothing. Avoid breathing vapor. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Keep away from heat and open flame.

TECHNICAL SUPPORT

Additional information, technical assistance, and management services are also available from a ChemCo Systems Technical Representative at sales@chemcosystems.com or 650-261-3790.

The properties listed in this bulletin are typical and descriptive of the product and should not be used for specification purposes. For specification preparation, reference the specification of this product available from ChemCo Systems.

CCS™ STRIPSEAL™

INJECTION SEAL - NON-SAG POLYUREA CRACK SEALER
FOR CONCRETE AND MASONRY SUBSTRATES

TECHNICAL DATA SHEET FOR PROFESSIONAL CONTRACTOR USE ONLY

PROJECT NOTES



Limited Warranty: Please read all information in the General Guidelines, Technical Data Sheets, Guide Specifications and Safety Data Sheets (SDS) before applying material. These products are for professional use only and preferably applied by professionals who have prior experience with ChemCo Systems materials or have undergone training in application of ChemCo Systems materials. Published technical data and instructions are subject to change without notice. Contact your local ChemCo Systems representative or visit our website for current technical data, instructions, and project specific recommendations.

ChemCo Systems warrants its products to be free of manufacturing defects and that they will meet ChemCo Systems' current published physical properties. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties by ChemCo Systems of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. ChemCo Systems shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. ChemCo Systems shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. ChemCo Systems reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

Disclaimer: All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and ChemCo Systems makes no claim that these tests or any other tests accurately represent all environments. ChemCo Systems is not responsible for typographical errors. © 2024 ChemCo Systems. All rights reserved. Revision 20240730.JC CPT 136 CCS StripSEAL