



ElectraSeal[®] ESD Concrete Sealer

Installation Instructions for use over slab on grade concrete

Revision Date 7.24.24*

What's in the pail: ElectraSeal is a proprietary hygroscopic concrete sealer and coating that provides consistent anti-static properties and ESD conductance. **The way it works:** Static electricity (typically generated as a by-product of movement) flows into the sealer and is discharged into the electrical ground system of the facility. **Note:** The following instructions shall be reviewed prior to installation.

1. Basic Requirements: All flooring must be installed at the final stage in any type of construction. Area lighting and HVAC must be running and fully functional. The temperature of the building and concrete slab must exceed 60° F. Read, comprehend and follow the safety recommendations as reported in the SDS sheets for the materials that will be installed.

2. Receiving: Inspect the inbound shipment and insure that the pails are intact and tightly sealed in the original containers and that they are clearly marked with ElectraSeal by United Static Control Products.

Before accepting shipment: If the shipment has been damaged in any way, take photos and report the damage to the driver or freight carrier immediately. Mark the damage on the bill of lading and contact United SCP's freight department immediately at 719 676 3928 extension 7001.

3. Inspection: The highest quality of materials and workmanship are employed in the manufacture of our materials and careful inspection is made prior to its shipment.

4. It is the installer's responsibility: to verify the accuracy of the order, insure the pails have been checked for damage and to pre-test the material for satisfactory results on the concrete slab prior to full scale application.

5. Storage: Store the material indoors and in a climate controlled environment. Do not store in direct sunlight. This product has a 2 year shelf life if stored in unopened containers.

6. Moisture Testing of Concrete Slab: Prior to installation, test the concrete slab in accordance with ASTM D4263. This test involves taping an 18" x 18" polyethylene sheet to the concrete subfloor and then waiting at least 16 hours prior to collecting the results. Visible condensation on the bottom of the sheet or darkening of the concrete indicates excessive moisture. Test the concrete's pH level in this area. The pH levels

shall be between 7 and 10. Should testing indicate excessive vapor emissions or inappropriate pH levels contact United Static Control Products prior to proceeding with the application.

7. Prepare concrete: Ensure substrate is clean, free of dirt, dust, oil, grease, wax and other compounds which may inhibit the bonding of ElectraSeal to substrate. Remove nuisance dust by sweeping with a soft bristle broom. A sweeping compound that does not contain oil may be used if needed.

Thoroughly vacuum slab to remove any remaining loose dirt or dust. Deep scrub concrete using ElectraClean applied with an auto scrubber for best results prior to application.

ElectraSeal does not encapsulate the concrete. If dyes and markers have been used on the concrete they may bleed through the ElectraSeal.

Allow slab to thoroughly dry – this may take up to 24 hours depending on the temperature and ambient humidity of the environment.

8. Mock-up / Bond Strength Test: Mask an area approximately 2' x 2' using standard blue painters tape. Apply 3 thin coats of ElectraSeal allowing the product to dry 30 minutes between coats. Allow the test area to fully dry 24 hours prior to proceeding with tape pulls test.

Tape pull test: Test bond strength as follows: With a razor knife etch a 1" x 1" "tic-tac-toe" pattern on the ElectraSeal. Cover this pattern with standard masking tape, press it into position and wait 2 minutes. Quickly pull the masking tape up from this pattern. Observe the tape. When a good bond is achieved a minimal amount of ElectraSeal will be removed by the tape.



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9. Masking: Mask walls and other encumbrances.

10. Repairing Concrete / Filling expansion

Joints: Standard concrete repair methods may be used with ElectraSeal should this be a requirement.

11. Install Ground Straps: Install 2 each electrical grounds straps for floors under 3,000 SF and 1 additional ground strap every 3,000 SF thereafter. [This is the preferred method.](#) **Note:** ElectraSeal will be applied over these ground straps.

12. Number of Coats: Three coats will provide optimum gloss and durability. For optimum shine and ease of maintenance top coat with one thin coat of ElectraGlaze sacrificial ESD floor finish and high speed spray buff with a white or champagne colored pad and a high speed burnisher. Consider ElectraShine as a spray buff lubricant.

13. Application of ElectraSeal: Do not dilute ElectraSeal. Best results are obtained when ElectraSeal is applied to cured concrete slabs which are 60 Deg F. or warmer and in relative humidity conditions of < 50%.

- A) Apply thin even coats using new non linting microfiber mop heads. Loop end rayon or other non linting finish mops may also be used for application. DO NOT allow ElectraSeal to puddle or darkening of the concrete will occur after approximately 1 minute.
- B) Allow ElectraSeal to dry, (depending on humidity and temperature) for at least 2 hours between coats.

NOTE: When applied in environments with an ambient humidity in excess of 80% rH United recommends increasing the drying time between coats to at least 4 hours while maintaining the suggested ambient application temperature of greater than 60° F.

- C) If burnishing is required or is desirable top coat the ElectraSeal with a thin even coat of ElectraGlaze ESD Floor Finish. ElectraSeal may be effectively recoated without removal.

14. Move in Tips: NOTE: Do not introduce water to any new ESD flooring for a period of at least 30 days after installation. Protect the floor during move in. Wear disposable shoe covers. Cover the flooring with Ram Board or Masonite sheet when moving in heavy items (especially with forklifts and man-lifts). Do not drag items such as benches and pallets across any type of ESD flooring. Place carpeted “clean off mats” in the doorways of the ESD area to remove contaminants from footwear and carts. Use carpeted mat that are long enough to take at least three steps on it prior to entering the ESD control area. Use new soft brooms, dust mops, damp mops, buckets and other cleaning tools dedicated for use on the ESD flooring only. Mark these items “for use in ESD area only.”

15. Maintenance: Dry dust mop the floor on a daily basis. Use a floor magnate to pick up ferrous chips and other steel debris. Sweep the floor as needed using a soft (new) push broom and an oil-free sweeping compound that will leave no oily residues. In most cases, scuff marks may be easily removed by using ElectraShine and a high speed buffer equipped with a white or champagne colored pad. To auto scrub or damp mop, use a dilute solution of ElectraClean and water.

16. Testing: ElectraSeal is warranted to meet ANSI/ESD S20.20-2021 Table 3 page 8 EPA ESD Control Items “flooring” when tested in accordance to ANSI/ESD STM7.1 @ >45% rH.

17. Disclaimer: Every effort has been made to provide accurate and reliable information in this document. However, United SCP cannot accept any responsibility for loss or damage that may result from the use of this information due to the possibility of variations of processing or working conditions and/or workmanship that is beyond our control. ElectraSeal is not designed to encapsulate concrete. As such, dyes, markers, etc. may bleed through the coating and should be removed prior to installing the material.



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Tech support is available by calling us at 719 676 3928 and selecting option 8.

REVISION HISTORY:

6.24.2023: Initial Release.

2.20.2024: Increased dry times during high humidity applications.

*7.24.2024: Added optimum number of coats (see section 12).

This document supersedes all previous instruction for application.

Approved by: SRC

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