DESCRIPTION

TreadWell ESD+, installed by Dancer Concrete Design, is designed as a solid color epoxy floor with grounding capabilities exclusive to ESD epoxy flooring systems.

<https://dancerconcrete.com/treadwell-esd/>

**Durability.** Final ESD urethane topcoat increases abrasion resistance over only-epoxy ESD floors.

**Brighter Space.**  The finished sheen brightens the space and makes for a seamless installation.

**Inspected and Approved.** All floors to be certified within specifications upon completion.

**Additional Options**

* Control and Construction Joint Fill
* Moisture Mitigation Primer with Extended Warranty

LIMITATIONS: New concrete should be poured with moisture reduction admixture and/or relative humidity readings below 75% measured by the Wagner RH meter. Not for use in areas subject to heavy impact. Some application marks from installation allowable for ESD flooring.

QUICK SPEC

STATIC CONTROL FLOORING

DANCER CONCRETE DESIGN, TREADWELL ESD+

FINISHED SHEEN: SATIN

Contact: Nick Dancer, 260-415-1951

Dancer Concrete Design offers AIA Accredited Courses for Epoxy Coatings in your office or ours. <https://dancerconcrete.com/continuing-education/> Please feel free to contact us for budget pricing, samples, or design considerations. Nick Dancer. nickdancer@dancerconcrete.com c. 260-415-1951.

PART 1 – GENERAL

1.1    SUMMARY

A.   Section includes products and procedures for installation of static control flooring system on concrete areas as specified herein as indicated on drawings.

1.2    SUBMITTALS

A.   Product Data: Manufacturer’s technical literature for each product indicated, specified, or required.

B.    Samples: For each type of exposure, finish, or color. Sample size 3” puck or 4”x6” minimum.

1.3    QUALITY ASSURANCE

A.    Qualifications: Company experienced in performing work similar in design, products, and extent to scope of this project; with a record of successful in-service performance; and with sufficient production capability, facilities, and personnel to produce specified work.

1.     Manufacturer Qualification: Approved by the manufacturer of epoxy products.

2.     System shall be in compliance with requirements of the United States Department of Agriculture (SDA), Food and Drug Administration (FDA), and local Health Department.

1.4    FIELD CONDITIONS

A.   Concrete flooring to be available and open for preparation steps. Once the floor is prepared, only allow foot traffic on the exposed surface.

B. Adequate lighting to be provided by the General Contractor or Owner before the install of flooring.

C. Area for installation to be maintained at a temperature between 60 F – 85 F and the relative humidity in the specified location of the application shall be less than 80% and the surface temperature shall be at least 5 F above the dew point.

D. A sufficient area for staging and mixing materials to be provided.

E. Building to be closed in with no water intrusion on the surface during the installation or curing process.

F. New Concrete Surfaces

1.     Concrete shall be moisture cured for a minimum of 7 days and have fully cured a minimum of 28 days in accordance with ACI-308 prior to the installation of the flooring system pending moisture tests.

2.     Concrete shall have a flat rubbed finish, float or light steel trowel finish.

3.     Prohibit improper application of liquid membrane-forming curing compounds, vehicles parking over the concrete surface, pipe-cutting operations over the concrete surface, storage of items on concrete less than 28 days old, petroleum, oil, hydraulic fluid, and acids as these may all affect final finish of floor treatment.

4.     Concrete surfaces on grade shall have been constructed with a vapor barrier to protect against the effects of vapor transmission and possible delamination of the system.

1.5 WARRANTY

1. Dancer Concrete Design warrants that material and installation is free from defects and will perform substantially.
2. Dancer Concrete Design’s liability with respect to this warranty covers labor and material of the installation for a period of two years.

PART 2 – PRODUCTS

2.1    ACCEPTABLE MANUFACTURES

A.   Basis of Design: for products and materials specified from TreadWell ESD+ installed by Dancer Concrete Design, Fort Wayne, Indiana. Products of the manufacturers are approved provided compliance with all technical requirements as specified herein:

1. Dancer Concrete Design, TreadWell ESD+, Fort Wayne, IN. Contact Nick Dancer, 260-415-1951, nickdancer@dancerconcrete.com
2. Dur-A-Flex, Inc., 95 Goodwin Street, East Hartford, CT 06108, Phone: (860) 528-9838, Fax: (860) 528-2802

2.2    REPAIR PRODUCTS

A. Mortar Patch. For areas requiring patching, a suitable cement-based product to be installed that resembles concrete.

 1.   Dancer Concrete Design; Surface Polish Patching Compound.

2.3    PRODUCTS.

1. Dur-A-Flex, Inc, Dur-A-Gard ESD, Epoxy-based static dissipative seamless flooring system with Armor Stat ESD, Urethane-based static dissipative topcoat.

 1.   Primer - Dur-A-Flex, Inc, Dur-A-Glaze #4 ESD Primer resin and hardener.

 2.   Base Coat - Dur-A-Flex, Inc, Dur-A-Gard ESD resin and hardener.

 3.   Topcoat - Dur-A-Flex, Inc, Armor-Stat ESD Topcoat resin, hardener and grit.

PART 3 - EXECUTION

For More Detailed Steps, please call Nick Dancer with Dancer Concrete Design – at 260-415-1951 or by email at nickdancer@dancerconcrete.com. Finishing steps vary depending on the job site conditions of concrete.

PART 3 - EXECUTION

3.1    EXAMINATION

A. Examine substrates, area and conditions regarding moisture content, installation, and any condition that could affect flooring performance.

3.2    PREPARATION

 A. General

1. New and existing concrete surfaces to be free of contaminants that may inhibit proper bonding of concrete surface. No acrylic concrete sealers to be used as a curing agent.

2. Moisture testing is to be done by relative humidity testing, ASTM F 2170. For a standard installation, readings must be below 75% RH.

a. If the relative humidity exceeds 75% RH then Dur-A-Glaze MVP Primer moisture mitigation system must be installed prior to resinous flooring installation. Slab-on grade substrates without a vapor barrier may also require the moisture mitigation system.

3. The surface shall be mechanically profiled by grinding equipped with a HEPA vacuum system to maintain air quality during preparation. The minimum profile must be CSP 3-4, as detailed by ICPI.

4. Cracks and non-moving control joints to be repaired per manufacturer's specification. All cold joints to be honored through the installed system and filled with an elastomeric joint filler.

3.3 APPLICATION

 A. General

1. The system shall be applied in five distinct steps as listed below:

 a. Substrate preparation

b. Priming

c. Install Copper foil tape

d. Base coat application

e. Topcoat application

2. Immediately prior to the application of any component of the system, the surface shall be dry and any remaining dust or loose particles shall be removed using a vacuum or clean, dry, oil-free compressed air.

3. The handling, mixing and addition of components shall be performed in a safe manner to achieve the desired results in accordance with the Manufacturer's recommendations.

4. The system shall follow the contour of the floor unless noted patching or leveling is specified.

5. The finish shall have a neat, clean, and organized appearance with straight lines and well-defined installation boundaries.

B. Primer

1. The primer shall be Dur-A-Glaze #4 ESD Primer that is mixed at the ratio of 2 parts resin to 1 part hardener per the manufacturer’s instructions.

2. The primer shall be applied notched squeegee and back rolled at the rate of 200 SF per gallon to yield a dry film thickness of 8 mils.

C. Copper Foil Tape

 1. Install copper foil tape conductive adhesive to ground.

2. Use a minimum of ½ inch wide copper foil tape.

3. Copper foil tape is to be installed at one point per 1,000 SF.

D. Base Coat

1. The base coat shall be Dur-A-Gard ESD comprised of a liquid resin and hardener that is mixed at the ratio of 3 parts resin to 1 part hardener per the manufacturer’s instructions.

2. The base coat of Dur-A-Gard ESD shall be applied by notched squeegee and back rolled applied at the rate of 100 SF per gallon to yield a dry film thickness of 16 mils.

 E. Topcoat

1. The topcoat shall be a Armor-Stat ESD kit comprised of a liquid resin, hardener and grit mixed per the manufacturer’s instructions.

2. The topcoat of Armor-Stat ESD shall be applied by notched squeegee and immediately back-rolled at the rate of 350 SF per kit to yield a dry film thickness of 3 to 4 mils.

3. The finished floor will have a nominal thickness of 28 mils.

3.4    FIELD QUALITY CONTROL

A. The following test shall be conducted by Dancer Concrete Design:

1. Temperature

 a. Air, substrate temperatures and, if applicable, dew point.

2. Coverage Rates

a. Rates for all layers shall be monitored by checking the quantity of material used against the area covered.

3. Surface resistance readings after 24 hour cure at 70 F

a. Floor readings shall be tested using OHM-STAT RT-1000 Megohmeter at 100V and read between 106-109 OHM per square

3.5    PROTECTION

A. The flooring shall be allowed to cure for 24 hours before other trades walk on the surface. The floor shall be allowed to cure 48 hours from the final topcoat until construction activities or setting of items on the floor. When setting items on the finished surface, they shall be placed on cardboard.
B.   Covering: After completion of installation, allow for proper cure and then protect epoxy floors from subsequent construction activities with a protective covering. No tape is to be used on the finished surface.

END OF SECTION 09 62 80