

T E C H N I C A L D A T A

C O L O R E X[®] S D / E C

1. PRODUCT NAME / MANUFACTURER

1.1 Product:
 ColoRex[®] SD/EC conductive/static dissipative vinyl tile resilient floor covering

1.2 Manufacturer:
 Forbo Flooring, Inc.
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1.3 Product Description:
 Construction: ColoRex[®] SD/EC is a homogeneous product sliced from a pressed vinyl block to assure a highly flexible tile of dense construction. ColoRex[®] SD/EC is dimensionally stable, extremely hard wearing and has a completely non-directional pattern.

1.4 Physical Characteristics: (dimensions are approximate)
 Size ----- 24.2" x 24.2" (61.5 cm x 61.5 cm)
 Gauge ----- 0.080" (2.0 mm)
 Packaging ----- 14 tiles (56.81 feet², 5.295 meters²)

2. PRODUCT PERFORMANCE AND TECHNICAL DATA

2.1 Reference Specification:
 ASTM F 1700, Standard Specification for Solid Vinyl Floor Tile
 ColoRex[®] SD/EC meets or exceeds all technical requirements as set forth in this reference specification.
 Class 1, Type A

2.2 Environmental:
 CHPS 01350: ColoRex[®] SD/EC meets the requirements for VOC emissions and indoor air quality.

ColoRex[®] SD/EC contributes to LEED[®] credits in the following categories:

Materials & Resources

Credit 4: Recycled Content (51% Pre-Consumer)

Indoor Environmental Quality

Credit 4.3: Low-Emitting Materials (Listed on LEM Table)

Credit 4.1: Low-Emitting Materials (Adhesive complies with SCAQMD Rule #1168)

2.3 Electrical Resistance:

ColoRex[®] SD: 1 X 10⁶ - 10⁸ ohms surface to ground
 ColoRex[®] EC: 2.5 X 10⁴ - 10⁶ ohms surface to ground
 When tested according to NFPA 99, ASTM F 150, EOS/ESD S7.1

2.4 Static Load Limit:

1,500 Pounds per square inch when tested in accordance with ASTM F 970-00, Standard Test Method for Static Load Limit.

2.5 Slip Resistance:

ColoRex[®] SD/EC meets or exceeds A.D.A. recommendation of 0.6 for flat surfaces when tested in accordance with ASTM D 2047.

2.6 Castor Resistance:

EN 425: Suitable for office chairs with castors.

2.7 Fire Testing:

ASTM E 648/NFPA 253 (Critical Radiant Flux): Class 1
 ASTM E 662/NFPA 258 (Smoke Density): 450 or less

2.8 Chemical Resistance: (Exposure Time: One Hour)

Sulfuric Acid (Concentrate) 95%	No Effect
Sulfuric Acid (77%)	No Effect
Sulfuric Acid (5%)	No Effect
Nitric Acid (Concentrate)	Very Slight Surface Attack
Nitric Acid (5%)	No Effect
Hydrochloric Acid (Concentrate)	No Effect
Hydrochloric Acid (5%)	Very Slight Dulling
Acetic Acid (5% or Concentrate)	No Effect
Sodium Hydroxide (50%)	No Effect
Ammonium Hydroxide (28%)	No Effect
Methyl, Ethyl, & Butyl Alcohol	No Effect
Phenol, Cresol	Very Slight Surface Attack
Benzene, Xylene, Trichlorethylene	No Effect
Gasoline, Mineral Oil, Vegetable Oil	No Effect
Chloroform, Carbon Tetrachloride	No Effect
Methyl Ethyl Ketone	Slight Surface Dulling
Acetone, Amyl Acetate, Ethyl Acetate	No Effect
Silver Nitrate (40%)	Slight Brown Stain
Ethyl Ether	No Effect
Formaldehyde (40%)	No Effect
Iodine	Yellow Stain

*Most stains may be removed by light sanding.

Tested in accordance with ASTM F 925, Standard Test Method for Resistance to Chemicals of Resilient Flooring.

3. INSTALLATION

3.1 Site Conditions:

The installation of ColoRex® SD/EC flooring should not begin until the work of all other trades has been completed, especially overhead trades. Areas to receive flooring should be clean, fully enclosed and weathertight. The permanent HVAC must be fully operational, controlled and set at a minimum of 68° F (20° C) for a minimum of seven days prior to, during, and seven days after the installation. The flooring material should be conditioned in the same manner for at least 48 hours prior to the installation. Areas to receive flooring shall be adequately lighted to allow for proper inspection of the substrate, installation and seaming of the flooring, and for final inspection.

3.2 Substrates:

Floors shall be sound, smooth, flat, permanently dry, clean, and free of all foreign materials including, but not limited to, dust, paint, grease, oils, solvents, curing and hardening compounds, sealers, asphalt and old adhesive residue. Wood floors should be double construction with a minimum total thickness of 1 inch. Wood floors must be rigid, free from movement and have at least 18" of well-ventilated air space below. Forbo floor coverings should not be installed over wooden subfloors built on sleepers over on or below grade concrete floors without first making sure that adequate precautions have been taken to ensure the structural integrity of the system, and to prevent moisture migration from the concrete slab. Concrete substrates should be prepared in accordance with ASTM F 710. Concrete shall have a minimum compressive strength of 3,000 psi. Patch and repair minor cracks and other imperfections using only the highest quality patching and leveling compounds in strict accordance to the manufacturer's recommendations for their use and application. Floor covering should not be installed over expansion joints. Suitable expansion joint covers should be used. It is essential that moisture tests be conducted on all concrete floors regardless of the age or grade level. Conduct calcium chloride tests in accordance with ASTM F 1869. Measure the internal relative humidity of the concrete slab in accordance with ASTM F 2170. One test of each type should be conducted for every 1,000 square feet of flooring (minimum of 3). The tests should be conducted around the perimeter of the room, at columns, and anywhere moisture may be evident. Concrete moisture vapor emissions must not exceed 5.0 lbs. per 1,000 square feet in 24 hours when using Forbo C 930 conductive adhesive, 8.0 lbs. per 1,000 square feet in 24 hours when using Forbo V 885 adhesive or 3.0 lbs. per 1,000 square feet in 24 hours when using Forbo 660 adhesive. Concrete internal relative humidity must not exceed 75% when using Forbo C 930 or Forbo 660 adhesives, or 85% when using Forbo V 885 adhesive. A diagram of the area showing the location and results of each test should be submitted to the Architect, General Contractor or End User. If the test results exceed these limitations, the installation must not proceed until the problem has been corrected.

Note: Moisture tests indicate conditions at the time of the test only. The absence of an acceptable vapor retarder under the slab, changes in the environment, or other circumstances beyond Forbo's control, may lead to adverse changes in the moisture condition of the concrete. Forbo's warranty shall not be extended to cover damage or failures caused by moisture conditions in excess of specified limits that occur after the time of initial testing or installation.

3.3 Adhesive:

ESD Control Applications:

Use Forbo C 930 conductive adhesive.

Use a 1/16" X 1/16" X 1/16" square notch trowel.

Spread Rate: Approximately 150 square feet/gallon.

Install material into semi-wet adhesive.

Non-ESD Control Applications:

Use Forbo V 885 adhesive. For optimum performance in areas with heavy rolling loads, or for additional protection from topical moisture, Forbo 660 adhesive may be used.

Use a 1/32" X 1/16" X 1/32" fine notch trowel.

Spread Rate: Approximately 150 - 200 square feet/gallon.

Install material into semi-wet adhesive.

3.4 Heat Welding (OPTIONAL):

For seamless, hygienic, watertight installation requirements, use ColoRex® SD/EC Vinyl Weld color-matched welding rod as manufactured by Forbo. Welding rod dimensions: 4 mm diameter; 165 linear feet per spool.

3.5 Flash Coving (OPTIONAL):

Flash cove ColoRex® SD/EC approximately 4" up walls (or desired height) at outside edges of floor covering. Use the recommended Forbo adhesive for flash coving applications.

3.6 Installation Guidelines:

Refer to Forbo Flooring, Inc. Installation Guidelines for complete installation and grounding requirements.

4. AVAILABILITY AND COST

Available through authorized Forbo Flooring, Inc. suppliers throughout North America. Contact Forbo Flooring, Inc. or authorized supplier for cost information.

5. WARRANTY

Limited 5-year warranty. For complete details, contact Forbo Flooring, Inc.

6. CARE AND CLEANING

After installation is completed, allow a minimum of 5 days for the adhesive to properly bond and cure before conducting wet cleaning procedures. See Forbo Flooring's Floor Care Guidelines for additional information.

7. SUPPORT SERVICES

7.1 Samples:

Submittal samples for verification and approval are available upon request from Forbo Flooring, Inc. Support Services. Samples shall be submitted in compliance with the requirements of the Contract Documents. Please fax all sample requests to +570 450 0229 or visit our website at www.forboflooringna.com. Accepted and approved samples shall constitute the standard materials that represent materials installed in the project.

7.2 For current installation and floor care guidelines, guide specifications, product specifications and other technical information, visit our website at www.forboflooringna.com.