**Description**
The Double Broadcast System (Dubro) is a 100% solids epoxy floor coating system with silica sand broadcast into the pigmented base coats and sealed with pigmented epoxy.

**Uses**
Dubro is designed for use in showrooms, restaurants, garages, restrooms, commercial kitchens, auto dealerships and airplane hangers. The Double Broadcast System is a decorative, durable and chemical resistant coating, which makes it perfect for residential and commercial applications. Dubro is designed to be used as a medium to heavy duty coating.

**System Overview**

**System Data**

<table>
<thead>
<tr>
<th>Coverages</th>
<th>Primer 250-300 ft² per gallon</th>
<th>Basecoat 125-150 ft² per gallon</th>
<th>Broadcast Coat 160 ft² per 100 lb bag</th>
<th>2nd Epoxy Coat 75-100 ft² per gallon</th>
<th>2nd Broadcast Coat 200 ft² per 100 lb bag</th>
<th>Topcoat 100-150 ft² per gallon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td>EC-72 Epoxy Patch Gel</td>
<td>EC-12 Epoxy Primer</td>
<td>EC-34 Epoxy Topcoat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelf Life</td>
<td>2 years</td>
<td>2 years</td>
<td>2 years</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Advantages**
USDA Compliant • Chemical Resistant • Durable • 100% Solids • Low Odor • Decorative • High Build • Seamless • Easy Clean Up

**Inspection**
The surface must be structurally sound, clean, dry and free of grease, paint, oil, dust, curing agents, laitance or any foreign material that will prevent proper adhesion. The concrete should be at least 2,500 PSI and porous or rough enough to allow the product to soak in. A minimum of 28 days curing time is required on all concrete. Prior to starting work, test existing concrete slab for efflorescence, moisture and hydrostatic pressure.
Preparation
Pre-cut and clean all cracks and joints with a concrete diamond blade to at least ¼ x ¼ inch. Prepare concrete to a profile equal to CSP 3-4 as specified by ICRI. Methods may vary according to the condition and hardness of the concrete. Other factors include the forecasted use of the surface and the environment in which it is to be installed. When preparing the surface use caution when shot blasting, scarifying too aggressively, leaving grind marks or grinding too smooth.

Moisture
All concrete should be tested for moisture before applying a seamless coating. If moisture emissions exceed 5 lbs/1000 square feet (ASTM F1869) or if the relative humidity (RH) exceeds 75% (ASTM F2170), please refer to the EC-15 Moisture Vapor Barrier Product Specification Sheet.

Crack Treatment
Mix 1 part A with 1 part B (by volume) of EC-72 Epoxy Patch Gel together for 3-4 minutes and apply to the crack using a trowel or putty knife. Patch all spalls and cracks with EC-72 and allow to dry 2-3 hours before priming. The material may be slightly overfilled in the crack and when completely dry (in 4-6 hours) can be sanded or ground smooth. This remedial approach to patch cracks is not guaranteed and it should be noted that when the substrate moves, it could likely crack the Dubro System.

Concrete Repair
For concrete that needs repairs beyond just dormant cracks, TC-23 Mortar Mix can be used. TC-23 is designed to be used as a general concrete repair mix for horizontal and vertical applications and can be used as a patching/underlayment material under most Westcoat systems. Please refer to the TC-23 Mortar Mix Product Specification Sheet for details.

Primer
Mix 2 parts A with 1 part B (by volume) of EC-12 Epoxy Primer together for 3-4 minutes. For best penetration into concrete, thin by adding 1-2 quarts of Westcoat's CA-23 to each 1½ gallon kit. Thinned material must be applied at less than 5 mils. To cure properly, do not allow product to puddle. Immediately apply at a rate of 250-300 square feet per gallon, using a trowel or squeegee and then back roll to ensure complete coverage. Be sure to apply up cove to termination point.

Aggregate Size
The size of aggregate will determine the finished texture. For an aggressive texture, mix equal parts of 20 mesh and 30 mesh silica sand. For a less aggressive texture, mix equal parts of 30 mesh and 60 mesh silica sand.

Base and Broadcast Coat
Mix 2 parts A and 1 part B of EC-34 for 3-4 minutes, then apply at a rate of 125 to 150 square feet per gallon. Broadcast pre-mixed silica sand aggregate into the wet base coat to refusal, at a rate of approximately 160 square feet per 100 pound bag, until no more shiny spots are evident. Careful and even placement of silica sand aggregate will help prevent displacement (ridges) of epoxy and ensure more even coverage.
Second Epoxy and Broadcast Coat
Mix 2 parts A and 1 part B of EC-34 for 3-4 minutes, then apply at the rate of 75-100 square feet per gallon. Broadcast silica sand aggregate evenly into wet EC-34, at a rate of approximately 200 square feet per 100 pound bag. After epoxy has cured, sand, grind or scrape area as needed. Sweep up excess silica sand and vacuum floor clean.

Topcoat
Mix 2 parts A and 1 part B (by volume) of EC-34 for 3-4 minutes. For color consistency, box all part A’s. Apply at approximately 100-150 square feet per gallon. Additional topcoats and/or additional broadcasts may be required to vary the texture.

If additional coats are desired, they must be applied within 24 hours or the cured material must be sanded and wiped with acetone, before application and applied at 200-400 square feet per gallon to obtain desired texture.

Prohibit traffic on floor for 48 hours after installation. Avoid heavy abrasion and chemical exposure for 5 days.

Optional Materials
Cement Options
• TC-23 Mortar Mix may be used as a general concrete repair mix for horizontal and vertical applications and can be used as a patching/underlayment material.

Cove
• EC-76 Cove Gel can be used to create cove at the wall to deck transition. Cove may be created using cove tool.

Additional Topcoat
• EC-95G Gloss Polyurethane Topcoat can be applied over the epoxy within 24 hours to improve chemical abrasion and UV resistance, as well as gloss.
• EC-101 Polyaspartic 100% Solids may be used as a non-yellowing, high gloss, quick drying, high build, mar and chemical resistant finish with outstanding wear resistance.
• EC-102 Polyaspartic is recommended when tire staining is a concern and also provides a quick drying, UV resistant, high gloss, high build, mar and chemical resistant finish.
• EC-50 Novolac may be used as a final topcoat for extreme chemical or heat conditions.

* Please refer to Product and System Specification Sheets for additional information.

Clean Up
Uncured material can be removed with solvent. If cured, material can only be removed mechanically or with an environmentally-safe solvent.
Maintenance
Interior Floors can be dust mopped daily or mopped using a neutral pH cleaner. For more information on floor care and maintenance, please refer to the General Maintenance sheet.

If re-coating of the floor is required due to wear or abrasion, you will need to clean and degrease the surface, then lightly abrade and reapply the topcoat. In most cases, you will need to clean the surface with a solvent such as acetone and thin the new topcoat as well. A primer may be required. We suggest you re-coat at 5 years, depending on use. Contact Westcoat or your applicator for details.

Health Precautions
Inhalation of vapor or mist can cause headache, nausea, irritation of nose, throat and lungs. Avoid breathing vapors. It is strongly recommended that respirators are worn. Prolonged or repeated skin contact can cause slight skin irritation. All epoxies have the potential of causing skin irritations or allergic reactions. Be careful not to get on skin, clothes or in eyes. Gloves are strongly recommended. If splashed in the eye, flush with warm water and contact a physician if blurring persists.

Solvent based products are extremely flammable. Extinguish all pilot lights and sources of ignition, such as electrical motors. Be sure to have adequate cross ventilation prior to installing.

Limitations
• This system is designed for professional use only.
• Read Product Specification Sheets for every product you will be using before beginning the project.
• Be sure to do adequate surface preparation.
• Be sure to measure and mix properly.
• For interior use only.
• Test for moisture in concrete and vapor drive.
• Be aware of the pot life of mixed material.
• Do not apply in temperatures below 50°F or temperatures above 95°F. Cooler temperatures will cause slower dry times.
• Heavier topcoat may become slippery.
• Approval and verification of proposed colors, textures and slip resistance is recommended.
• Do not allow Westcoat products to freeze.

Slip Precaution
Westcoat Specialty Coatings Systems highly recommends the use of a slip-resistant additive to all coatings/systems that may be exposed to wet, oily, greasy or slippery conditions. It is the end user's responsibility to provide a flooring system that meets current safety standards. Westcoat and its distributors will not be responsible for injury incurred during a slip and fall incident. For the current coefficient of friction requirements, please consult your local building codes.
**Technical Data**

<table>
<thead>
<tr>
<th>ASTM / Test Data</th>
<th>Westcoat Dubro - Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Properties (ASTM D638)</td>
<td>Strength - Neat Epoxy 4,000 psi, Elongation - Neat Epoxy 12% (7 day cure)</td>
</tr>
<tr>
<td>Tensile Strength (ASTM C307)</td>
<td>&gt;1800 Resin, Hardener, Aggregate Filled</td>
</tr>
<tr>
<td>Flexural Strength (ASTM C580)</td>
<td>4,500 psi (+/- 200 psi)</td>
</tr>
<tr>
<td>Flexural Properties (ASTM D790) Neat Epoxy</td>
<td>N/A - see Thin Film data</td>
</tr>
<tr>
<td>Compressive Strength (ASTM C-579)</td>
<td>10,000 psi - 7 day cure</td>
</tr>
<tr>
<td>Indentation (Load - Mil-D-3134, Para. 4.7.4.2.1)</td>
<td>Method: 1 in. diameter steel ram steadily applies a load of 2,000 lbs for 30 min on the test specimen that is placed on the concrete.</td>
</tr>
<tr>
<td>Indentation (Impact - Mil-D-3134, Para. 4.7.3)</td>
<td>0.012 indentation - 7 day cure</td>
</tr>
<tr>
<td>Adhesion to Concrete (Tensile Pull - ACI 503 R)</td>
<td>&gt;400 psi (100% concrete failure csp 3-4)</td>
</tr>
<tr>
<td>Abrasion Resistance (Taber - ASTM D4060).</td>
<td>60 mg. 1000 cycles, 1000 g. load, Wheel No. 17</td>
</tr>
<tr>
<td>Hardness ASTM D-2240 Shore D)</td>
<td>80-85 Shore D</td>
</tr>
<tr>
<td>Water Absorption (ASTM C-413)</td>
<td>&lt;0.2% - 7 day cure</td>
</tr>
<tr>
<td>Thermal Coefficient of Linear Expansion (ASTM C-531)</td>
<td>10.0 x 10^-6 in. / in./˚F (7 day cure)</td>
</tr>
<tr>
<td>LEED EQ Credit 4.1</td>
<td>Meets</td>
</tr>
<tr>
<td>LEED EQ Credit 4.2</td>
<td>Meets</td>
</tr>
</tbody>
</table>
| Temperature Resistance                   | Continuous exposure: 140˚F  
Intermittent exposure: 200˚F                                                               |
| Flammability Rate of Burning (ASTM D635) | CC2; Specimens continue to burn past the 25mm reference mark. The flame did not reach the 100mm mark on any of the specimens tested. |
| Flame Spread (ASTM E-84/NFPA 255)        | Class B                                                                                  |
| Critical Radiant Flux (ASTM E648)        | Class I                                                                                  |