

product data

SELECTION & SPECIFICATION DATA

TYPE & DESCRIPTION	610 Laminate Broadcast is a multilayered Chlorendic Polyester monolithic flooring system formulated to produce a high density, easily cleaned, slip resistant surface.
ADVANTAGES	Cures quickly to form an exceptionally tough, impact and abrasion resistant system, cured at temperatures as low as 60°F. Excellent adhesion to concrete, steel, and wood. Minimum down time. Sanitary, non-shrinking polymer. Easy to clean - USDA acceptable.
CHEMICAL RESISTANCE	Not affected by water, oil, brine, most acids, and alkalines. For specific recommendations, please refer to Greenstone's Chemical Resistance Guide, or contact Technical Service.
USES	Used as part of a polymer system for resurfacing floors in food production plants, aisle ways, chemical spill containment area's, industrial production facilities, and pulp and paper mills.
GOVERNMENT AGENCY ACCEPTANCE	Meets the requirements of the U.S. Department of Agriculture (USDA) for use as an incidental food contact flooring system.

FOR INDUSTRIAL USE ONLY!

PHYSICAL DATA	Compressive Strength, ASTM D695 - 18,610 psi (resin) Tensile Strength, ASTM D638 - 9,610 psi (resin) Flexural Strength, ASTM D790 - 16,000 psi (resin) Thermal Coefficient of Linear Expansion, ASTM D696 - 1.2×10^{-5} in/in/°F. Bond Strength, ASTM C-321 - Greater than 350 psi (100% substrate failure). Impact Strength - 160 in/lbs. Indentation - MIL-D-3134F - No Indentation Water Absorption - ASTM C-413 - 0.024% Shelf Life - 6 months when storage temperature is less than 70°F. Working Time - approximately 20 minutes at 75°F. Potlife - approximately 15 minutes at 75°F. Flammability - Does not support combustion Cure Time - 610 Laminate will harden within a few hours at 75°F. The warmer the temperature, the faster it cures. Allow a minimum cure of 24 hours for light traffic, and 96 hours for heavy traffic loads and chemical spillage. Solids - 98% by weight, 98% by volume. Colors - Natural, Gray, Tile Red (special colors may be available upon request)
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PACKAGING / COVERAGE	<i>Greenstone 610 Laminate Broadcast is packaged in bulk quantities, with proportioning tools provided as part of the kit.</i> <i>610 - 50 square foot kit - covers 50 square feet at 1/4" film thickness, consisting of the following -</i> <i>1 EA - 5 Gallon Pail - Resin</i> <i>1 EA - 16 oz. container - Catalyst</i> <i>1 pint - 500/600 Series Primer</i> <i>1 EA - 4 oz. container - 500/600 series topcoat additive.</i> <i>150 pounds - chemical resistant broadcast aggregate</i> <i>1 Set - Bulk Measuring Tools</i> <i>610 - 500 square foot kit - covers 500 square feet at 1/4" film thickness, consisting of the following -</i> <i>1 EA - 50 Gallons - Resin</i> <i>1 EA - gallon container - Catalyst</i> <i>1 gallon - 500/600 Series Primer</i> <i>1 quart - 500/600 series topcoat additive.</i> <i>1400 pounds - chemical resistant broadcast aggregate</i> <i>1 Set - Bulk Measuring Tools</i>
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SUPPLEMENTAL PRODUCTS	550 Grout, 610 Coving, 651 Topcoat
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SURFACE PREPARATION

New Concrete: must have a minimum of 28 days cure, and no curing agents or sealers shall be used. Remove oil, grease or other loose or foreign materials and contaminants. A good bonding tooth, the texture of rough sandpaper, is required to maximize adhesion, with the removal of all glaze. Examples of mechanical surface prep including, but not limited to -

- A. Sandblast with steel shot, fine silica, or other similar material.
- B. Wheel Abrader
- C. Scarify

Existing Concrete: remove all loose, weak concrete, and any paint wax, oil, grease or other contaminants. Once the concrete has been cleaned and neutralized, mechanical surface preparation shall be used to provide a good bonding tooth, a texture of rough sandpaper, with the removal of all glaze. Examples of mechanical surface preparation including, but not limited to -

- A. Sandblast with steel shot, fine silica, or other similar material.
- B. Wheel Abrader
- B. Scarify

Note: Holes and depressions 1/4" or deeper should be prefilled with 550 grout, or a similar system, prior to application. All surfaces must be dry prior to application of polymer system.

MIXING AND EQUIPMENT

Store all materials at 65°F to 80°F, for at least 48 hours, prior to use.

MIXING

500/600 Primer is a one component material, which does not require mixing.

610 Laminate Broadcast - mix 1 gallon of resin with 1.5 oz. catalyst (at 75°F) for 2 minutes, until homogeneous and pour mixed solution out on substrate.

610 Laminate Topcoat - mix 1 gallon of resin with 2 oz., 500/600 series topcoat additive until homogeneous, then add 1.5 oz. of catalyst (at 75°F), and mix for an additional 2 minutes.

Important! - The working life of the mixed blend is approximately 15 minutes. Mixed materials remaining in a container will produce heat. Keep away from combustible materials. Do not reseal mixed containers!

Catalyst Levels

Adjust Catalyst levels in the 610 Laminate System based on the following table -

60°F-68°F - 2.5 oz. catalyst per gallon of resin

68°F-75°F - 2.0 oz. catalyst per gallon of resin

75°F-82°F - 1.5 oz. catalyst per gallon of resin

82°F-90°F - 1.0 oz. catalyst per gallon of resin

For applications where the substrate temperature is outside the above listed chart, contact Greenstone Polymers Technical Service Department for recommendation.

APPLICATION AND SAFETY

APPLICATION

Caution! Application in direct sunlight, resulting in rising surface temperature, may cause blistering of the materials due to expansion of entrapped air or moisture in the concrete. Concrete surfaces that have been in direct sunlight must be shaded for 24 hours prior to application, and remain shaded until the initial set of the polymer. When the substrate temperature is rising, it is recommended to postpone application.

Minimum application temperature: Do not apply when substrate temperature is below 60°F.

500/600 Series Primer - Apply 3-4 mils of material at a rate of approximately 333 square feet per gallon.

Cure to a tacky finish (approximately 30 minutes), and apply the first coat of 610 Laminate within 4 hours maximum.

SEED COAT: Pour the mixed liquids on the floor at a rate of approximately 50 square feet per gallon. Broadcast aggregate to excess, leaving a 1 foot wet edge for additional batches. Repeat the process (4 seed coats total) to achieve the required film thickness of 1/4". Sweep off the excess aggregate, between each liquid coat, when the floor is set to the touch (approximately 1 hour at 75°F).

TOPCOAT / GEL COAT: The gel coat thickness determines the degree of non-skid for the finished floor. A roller applied gel coat will provide a very pronounced slip-resistant surface, while a squeegee applied gel coat will result in more moderate slip resistance.

CURE TIME - Allow 24 hours, at 75°F, for light traffic, and 96 hours for full cure.

CLEAN-UP - Cured or hardened 610 is almost impossible to remove. Clean tools and equipment immediately with hot soapy water, or a mixture of acetone and ethanol.

SAFETY

Observe good personal hygiene. Certain personnel may be sensitive to various types of resins which may cause dermatitis. Avoid contact with skin and breathing of vapor. Read and follow all caution statements on product info bulletin, material safety data sheet and container labels for this product. This bulletin provides standard information for the system and application procedure. Since varying application conditions may not be covered, consult GREENSTONE Technical Service Department for further information.

We guarantee our product to be free of defects in material and workmanship, and to be in accordance with our company quality control standards. All data, statements and recommendations made herein are based upon information we believe to be reliable, but are made without any representation or guarantee or warranty of accuracy and are made with reservation of all patent rights. Our products are sold on the condition that the user will evaluate them, as well as our recommendations, to determine their suitability for his own purpose before adoption. Also, statements regarding the use of our products or processes are not to be construed as recommendations for their use in violation of any patent rights or in violation of any applicable laws or regulations. Liability under any condition shall be limited to replacement of material only. No liability is assumed or implied, for injury to personnel, labor costs, product loss or any other expenses incidental to the structure or operation of the plant and equipment where the system is being applied.