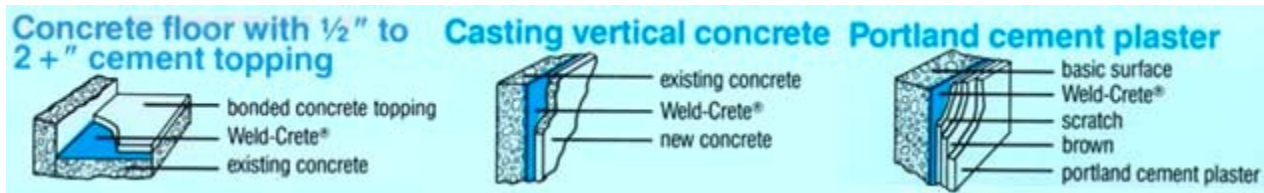


WELD-CRETE® CONCRETE BONDING AGENT

Weld-Crete® bonds new concrete, stucco, tile setting beds and terrazzo to any structurally sound surface, interior or exterior. Use Weld-Crete's® open time to your advantage in bonding to concrete shear walls when you need a time lapse between application of bonding agent, placement of reinforcement steel, placement of formwork and placement of concrete.

The original chemical concrete bonding agent, Weld-Crete® incorporates polyvinyl acetate homopolymer in a patented formulation. For exterior and interior use, Weld-Crete® will bond new concrete, Portland cement plaster and cementitious mixes to structurally sound concrete floors, walls, columns, beams, steps and ramps. Weld-Crete® can be "painted on" in a single application 1 hour to 10 days prior to concrete placement. Use Weld-Crete's® open time to your advantage in bonding to concrete shear walls when you need a time lapse between application of bonding agent, placement of reinforcement steel, placement of formwork and placement of concrete.

Weld-Crete® is also used for: bonding setting beds for ceramic tile; bonding Portland cement plaster and stucco mixes; and to bond to surfaces such as brick, block, tile, marble, metal, glass block, soundly adhered paint (non-soluble in water, i.e. casein and calcimine paints), and silicone.



PERFORMANCE PROPERTIES

Data obtained from tests conducted periodically by leading independent laboratories. Test reports are available upon request.

Tensile Bond Strength:

ASTM C-932 (pulling apart bonded cement briquet halves). In all cases failure occurred in the cementitious material, not in the bond. 385 psi. Avg. 28 days.

Flexural Bond Strength:

ASTM C-78 (concrete beams laminated with bonding agent). 603 psi. Avg.

Shear Bond Strength:

ASTM C-1059 (slant shear cylinder test). 740 psi. Avg. 14 days.

Temperature Range:

ASTM C-109 (specimens brought to 35 degrees F for 1 hr., then to 310 degrees F for 2 hrs). No bond failure. Shear tests 400 psi. Avg.

Freeze-Thaw Stability:

5 cycles freeze (-10 degrees F and thaw). Freeze-thaw stable.

Toxicity:



Enclosed mice exposed to 30 cc volatized bonding agent for 1 hr. Non-toxic, no ill effects after 7 days.

Fire Resistance:

ASTM E-119 (bonded assembly). Passed 2 hr. Fire Test 1800 degrees F and 1 hr. Hose Stream Test.

Flammability:

Meets MIL-B-19235C, non-flammable.

Acid Resistance:

1" concrete slabs bonded to 1/2" gypsum plaster subjected to seepage of strong detergents and synthetic urine for 10 hrs. a day. No bond failure after 25 consecutive days. Also unaffected by alkalinity of cement.

Life Expectancy:

Lab tested and field proven. Non-deteriorating bond; retains strength and flexibility.

STANDARDS AND APPROVALS

ASTM C-1059

ASTM C 932

ASTM C 631

Military Specification, MIL-B-19235C(YD)

General Services Administration Specification for Bond Adhesive

Corps of Engineers Specification CE-240.01

Canadian Standards CSA A261

Approved: New York City Board of Standards & Appeals under Cal. No. 626-52-SM

City of Los Angeles Board of Building and Safety Commissioners (Research Report No. 2463)

AVAILABILITY AND COST

Dealers

Weld-Crete® is available from building supply dealers throughout the United States and Canada. Obtain local price quotations to determine costs.

Coverage

Weld-Crete® covers approximately 200 to 300 square feet per gallon, depending on method of application, temperatures, porosity and texture of the substrate.

Packaging

Weld-Crete® is available in 55 gallon drums, 5 gallon pails, gallon and quart containers.

Color

Weld-Crete® is blue and non-bleeding.

WARRANTY

Weld-Crete® is suited for the purposes described when used according to directions. Buyer agrees in purchasing this product that the Seller's liability for breach of warranty shall in no case exceed the price of the product. Because of the broad range of conditions beyond our control which may be encountered in the use of the



product, Larsen Products Corp. makes no other warranty, express or implied, and no agent or other person is authorized to do so. Nevertheless, we will be glad to provide information about any type of installation you may request.

OTHER RESOURCES

[LEED Information](#)
[Weld-Crete® MSDS](#)
[Weld-Crete® Guide Specifications](#)
[Submittal Sheet](#)

GUIDE SPECIFICATIONS (DIVISIONS 3 AND 9)

1. General

- 1.1 Product Handling
 - a Deliver Weld-Crete® to job in original container with seals unbroken and use without reducing.
 - b Materials Storage: Protect Weld-Crete® from freezing.
- 1.2 Environmental Conditions
 - a Air and surface temperatures must be above freezing during application of Weld-Crete®.

2. PRODUCTS

- 2.1 Materials
 - a Bonding Agent: Weld-Crete®, Larsen Products Corp., Jessup, Maryland.

3. EXECUTION

- 3.1 Surface Preparation
 - a Surfaces to receive Weld-Crete® **MUST BE CLEAN**, free from loose material, dust, dirt, oil, grease, wax, loose paint, mildew, rust, laitance or efflorescence. If preparing an old concrete floor surface (steel trowel finish), mechanically scarify the surface and follow with an acid wash and thoroughly rinse with clean water. An economical method for cleaning concrete floor surfaces is to use a 10% muriatic acid solution followed by a thorough washing. Degreasing solvents such as Varsol are also effective.
 - b Surfaces to receive Weld-Crete® **MUST BE STRUCTURALLY SOUND**. On newly placed concrete floors to receive a bonded topping, give the surface a rake or broom finish. Surfaces with form-releasing agents, curing compounds, hardeners and sealers must be compatible with Weld-Crete®. Glossy painted surfaces should be dulled with an abrasive. New paint should cure 7 days before applying Weld-Crete®. Paints must be firmly adhered to the substrate. Do not apply over paints or materials that are soluble in water. Do not apply over frozen concrete or plastic surfaces. Weld-Crete® may be placed over dry or damp surfaces (eliminate all water puddles). Do not apply where hydrostatic pressure is present in the substrate. Surfaces should be inspected for excessive cracking and properly prepared prior to application of the bonding agent.
- 3.2 Installation
 - a Application of bonding agent: Apply Weld-Crete® uniformly, using brush, roller or spray, to form a continuous blue film over the entire surface. Allow one hour to dry. **EXCEPTION: FAST SET PATCHING CEMENTS AND GROUTS MUST BE APPLIED WHILE THE WELD-CRETE® FILM IS STILL TACKY.**
 - b Inspection of bonding agent: Prior to placement of cementitious topping, inspect bonding agent application for continuity of blue film over the entire bonding surface. Do not apply new concrete to frozen Weld-Crete®. Reapply Weld-Crete® over areas not satisfactorily covered. Protect the applied film from dirt and debris until the fresh concrete overlay is in place.

■ 3.2.1 Application of Concrete Overlays

- 1 Delayed toppings shall be over Weld-Crete® in a minimum 1/2 inch thickness on surfaces shown and specified. Provide for a butt joint at adjacent edges. All joints must duplicate the joints in the substrate and all joints must be sealed against water penetration. Form isolation joints or cut with a dry vacuum saw. Cut control joints not more than one half the depth of the concrete overlay. Remove standing water from newly bonded concrete surfaces. Concrete toppings can be applied as soon as the film is dry, or delayed a week to 10 days, with no effect on the bond. Follow same application for overlays on precast hollowcore floor systems. Follow Portland Cement Association Standards.
- 2 Follow accepted industry standards for protection of newly bonded concrete. Do not use a "wet" type saw to cut isolation joints on newly bonded concrete overlays. Seal all joints against water penetration.

■ 3.2.2 Bonded Concrete Shear Wall

- 1 Prior to application of Weld-Crete®, set all anchors on existing wall as shown and specified. Apply Weld-Crete® as directed, then proceed with placement of reinforcing steel, erection of forms and placement of concrete. Seal all joints against water penetration.

■ 3.2.3 Application of Portland Cement Terrazzo

- 1 Apply Portland Cement Terrazzo over Weld-Crete® to surfaces as shown and specified.
- 2 One-half inch Portland Cement Terrazzo Flooring: Install terrazzo dividing strips prior to application of Weld-Crete®. Follow NTMA specification for monolithic terrazzo. Do not allow standing water or wet materials to remain on newly bonded terrazzo surfaces. Seal all joints against water penetration.

■ 3.2.4 Application of Portland Cement Plaster

- 1 Apply Portland Cement Plaster over Weld-Crete® on surfaces as shown and specified. NOTE: Portland Cement Plaster can be applied as soon as film is dry, or delayed a week to 10 days, with no effect on the bond. Seal all joints against water penetration.
- 2 Two and Three Coat Applied: Apply scratch coat a minimum of 3/8 inch over Weld-Crete® on surfaces as shown and specified. NOTE: Do not scratch through to the Weld-Crete® film. Allow to dry 24 hours. Follow with second and third coat applications. Seal all joints against water penetration.
- 3 Two Coat Spray Applied: Apply a thin dash coat by hand or spray over Weld-Crete® and allow dash to firm up and become hard. Apply finish coat 3/8 inch thick. Seal all joints against water penetration. NOTE: Weld-Crete® helps equalize suction on vertical applications, which produces a more uniform finish coat. For less than 3/8 inch thickness, refer to [Acrylic Ad-Mix 101®](#).

■ 3.2.5 Application of Mortar Setting Beds

- 1 To receive ceramic tile, precast terrazzo, etc., application of mortar Setting beds shall be a minimum of 3/8 inch thickness over Weld-Crete® on surfaces as shown and specified. Seal all joints against water penetration.

■ 3.2.6 Application of Non-Shrink Fast-Set Mortars and Grouts

- 1 Applications of non-shrink fast-set mortars and grouts shall be over Weld-crete® while Weld-Crete® is still tacky. Seal all joints against water penetration.

■ 3.2.7 Application of Bedcoat

- 1 Applications of bedcoat for Simulated Stone Finish (Marblecrete) shall be a minimum of 3/8" thickness over Weld-crete® on surfaces as shown and specified. Seal all joints against water penetration.