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JULY 2025
(Supersedes June 2013)**DECK-O-WELD®****Bonding Agent and Integral Mix/Admixture****DESCRIPTION**

DECK-O-WELD bonding agent is a high solids content, water dispersion of bonding polymers, compounded specifically for modifying Portland cement, plastic, and stucco compositions. It is a milky white, non-yellowing liquid, ready for use as an interface or intramix bonding agent. When properly mixed and applied, DECK-O-WELD forms a tenacious bond between new-to-old concrete.

Cement mortars modified with DECK-O-WELD are hard, tough, and durable. The product offers superior tensile, flexural, and impact strengths. Also, mortars and concrete modified with DECK-O-WELD typically show greater adhesion.

DECK-O-WELD-modified concrete is unaffected by ultraviolet light and will not yellow.

USES

DECK-O-WELD's most common uses are for patching and resurfacing, spray and fill coats, repairing precast building panels and beams, and industrial flooring.

DECK-O-WELD is ideal for interior or exterior bonding, topping, leveling, patching, and dressing of concrete and masonry. As a bonding agent, it improves the adhesion of pneumatically hand-applied concrete or mortar. DECK-O-WELD-modified mortars provide excellent adhesion to a variety of surfaces, including concrete and masonry. The result is a more attractive, durable, uniform concrete finish, which costs far less than polishing or rubbing.

DECK-O-WELD is also ideal for use as an interface or intramix bonding agent in bonding slurries, topping mixtures, finishing, and mortar mixes.

FEATURES/BENEFITS

- Forms an excellent bond to concrete.
- Functions effectively for interior repairs between new-to-old concrete.
- Offers superior flexural, adhesive, and impact strengths, plus excellent abrasion resistance.
- Provides a hard, durable finish at far less cost than polishing or rubbing.
- Will not after-yellow.
- Will not stain or discolor concrete.
- May be used as is or dilute as needed.
- Reduces permeability.
- Reduces chloride intrusion.

PACKAGING

1 Gallon (3.79 L) Units (4/Carton)
5 Gallon (18.93 L) Pails
55 Gallon (208.20 L) Drums

COVERAGE

Approximately 200 ft.²/gal. (4.91 m²/L) straight.

SHELF LIFE

Nine months from date of manufacture when stored indoors on pallets in a dry, cool area.

SPECIFICATIONS/STANDARDS

- ASTM C 1059, Type 1 (Re-emulsifiable)

TECHNICAL DATA

VOC Content: 0 g/L

APPLICATION

Surface Preparation ... All surfaces must be structurally sound, clean and free of grease, oil, dust, dirt, curing and release compounds and other foreign contaminants. All loose and unsound concrete must be removed.

CONTINUED ON REVERSE SIDE ...

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Pre-soak all surfaces with water to a saturated, surface dry (SSD) condition, prior to applying DECK-O-WELD. DECK-O-WELD bonding agent must be thoroughly worked and scrubbed onto the prepared concrete surface in order to realize maximum bonding efficiency. The cementitious material should be applied while the product is still tacky to achieve optimal bonding results, but can be allowed to dry prior to application of the cementitious material.

Mixing ... Specific mixing proportions for these various DECK-O-WELD mixes are listed on the container. All cautions, mixing and application information and directions furnished on container labels should be read and followed. For normal mixing, dry blend the Portland cement and sand. Mix the product and water together, add the cement-sand mix, and then mechanically blend the complete mix thoroughly. The quantity of water should be determined by trial mix, where only 50% of the water is first added to the product before adding to the sand-cement mix. After thorough preliminary mixing, add increments of additional water until the desired consistency is obtained.

APPLICATION MIXES BY VOLUME

1. Bonding Slurry:

1 part DECK-O-WELD
2.5 parts Portland cement
2.5 parts fine sand (ASTM C 144)
Water: Enough for a thick, creamy consistency (approximately 1 part).

One-gallon unit of DECK-O-WELD used to mix a bonding slurry will yield approximately 0.47 ft.³ (0.013 m³), enough to cover an area of 90.24 ft.² (8.45 m²) at 1/16" (1.59 mm) thickness or 45 ft.² at 1/8" (3.18 mm) thickness. Apply with a stiff bristle brush; be sure to work bonding slurry into existing concrete pores.

2. Topping and Shallow Patching Mix:

1 part DECK-O-WELD
5 parts Portland cement
15 parts fine sand (ASTM C 404, Size #2) Water:
Enough for trowelable consistency (approximately 2 parts).

A representative test area should always be applied if DECK-O-WELD is to be used with a pigment to ensure proper color, shading and resistance to efflorescence.

3. Mortar Mix:

1 part DECK-O-WELD
5 parts Portland cement
15 parts fine sand (ASTM C 404, Size #2)
Water: Enough for desired consistency (approximately 1 ½ to 2 parts).

One gallon of DECK-O-WELD used in a topping or mortar mix will yield approximately 1.8 ft.³ (.05 m³) to cover an area of 86 ft.² (7.99 m²) at ¼" (6.35 mm) thickness. Topping or mortar mix should be applied while the DECK-O-WELD bonding slurry is still soft and plastic.

4. Finish Mix: (For non-traffic surfaces)

1 part DECK-O-WELD
5 parts Portland cement
15 parts fine sand (ASTM C 404, Size #2)
Water: Enough for stiff, brushable consistency (approximately 4 parts).

5. Concrete Admixture:

Add two gallons of DECK-O-WELD per cubic yard of ready-mix or onsite batched concrete.
W. R. MEADOWS recommends removing one gallon of water per cubic yard of ready-mix to compensate for the water portion of DECK-O-WELD. Do not wet cure concrete modified with DECK-O-WELD.

DECK-O-WELD as a Concrete Admixture ... Dilute DECK-O-WELD with a portion of the normal water requirement before adding to the blended Portland cement aggregate mixture. Use one gallon (3.79 L) minimum and two gallons (7.57 L) maximum of DECK-O-WELD for every 94 pound (42.64 kg) bag of cement. For ready mix, use one gallon (3.78 L) per 94 pounds (42.64 kg) of cement.

DECK-O-WELD as a Plaster Adhesive and Admixture

... The old masonry surface should be cleaned of all grease, oil and foreign matter, with detergent or solvents. Detergents must be flushed away with clean water. A completely dried coating of adhesive must be recoated with DECK-O-WELD before applying plaster.

Apply new concrete, plaster or mortar when DECK-O-WELD is tacky – at least 20 minutes, but less than two hours after application.

To reinforce and improve the physical properties of the plaster mix, 12 gallons (45.43 L) of diluted DECK-O-WELD emulsion [1/2 to 1 gallon (1.89 to 3.79 L)] of DECK-O-WELD diluted to 12 gallons (45.43 L) with water and 200 pounds (90.72 kg) of plaster are mixed and applied as usual.

Pre-soak all surfaces with water to a saturated, surface dry (SSD) condition, prior to applying DECK-O-WELD. DECK-O-WELD bonding agent must be thoroughly worked and scrubbed onto the prepared concrete surface in order to realize maximum bonding efficiency. The cementitious material should be applied while the product is still tacky to achieve optimal bonding results, but can be allowed to dry prior to application of the cementitious material.

PRECAUTIONS

Keep from freezing. Approximate work life is 30-40 minutes at 70° F. Use care in finishing thin overlays. Wood float when possible. Steel troweling should be limited to a minimum number of passes 10-15 minutes after placement. When DECK-O-WELD is used in a bonding grout and the patch topping is plain concrete, use a membrane curing compound. Do not use as a structural bonding agent for toppings or any other applications. If the patch or topping contains DECK-O-WELD as an admixture, wet curing is not recommended.

DECK-O-WELD bonding slurry or topping mix should be mixed thoroughly to remove lumps. Avoid air entrapment. Clean tools with water immediately. Follow all cautions on container labels. Do not add to premixed grouts. Specifier and user shall determine suitability of product for specific applications and assume all responsibilities in connection therewith.

Note: Increased amounts of various fillers, extenders or additives in the concrete mix can result in the concrete having a higher-than-normal porosity and some very porous hot spots. Coverage ratios must be adjusted to compensate for resulting penetration and additional coverage coats required to provide proper surface treatment. Read and follow application information and precautions. Refer to safety data sheet for complete health and safety information.

For most recent data sheet, further sustainability information, and SDS, visit www.wrmeadows.com.



LIMITED WARRANTY

W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. Read complete warranty. Copy furnished upon request.

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