



# WATERHOLD

## *Evaporation Retardant for Concrete Flatwork*

### 1. Product Description

a. **Basic Use:** Waterhold is a water-based, VOC compliant spray-on liquid for application over fresh concrete surfaces. By forming a continuous mono-molecular film over the surface, it keeps bleed water in the concrete under hot, windy, or dry conditions. By retarding the evaporation of bleed water, plastic shrinkage cracking and crusting is minimized or avoided. Waterhold enhances the finishing characteristics of concrete flatwork and is excellent as a finishing aid.

b. **Features/Benefits:**

- Prevents premature dry-out of flatwork.
- Enhances finishing procedures by providing adequate lubrication.
- Neutralizes the effects of low relative humidity and wind.
- Helps prevent map cracking and plastic shrinkage.
- Can be sprayed on flatwork as a finishing aid.
- Supplied as a concentrate for economical use.

c. **Typical Applications:** Floors, pavements, walks, decks, aprons, dry shakes and toppings.

d. **Limitations:** Do not use below freezing. Waterhold is not suitable for use as a surface retarder for producing exposed aggregate surfaces. See Surfard for this application. Do not use Waterhold as a curing compound.

e. **Composition:** Waterhold is an aqueous concentrate which lends itself to quick, easy dilution with water.

f. **Color/Appearance:** In its concentrated form, Waterhold has a green/yellow color. It gives concrete a translucent green cast when sprayed onto the surface.

### 2. Packaging

Waterhold is supplied in 1-gal. (3.8 liter) jugs (4 jugs per case), 5-gal. (18.9 liter) pails, and 55-gal. (208 liter) drums.

### 3. Estimating/Yield

One gal. (3.8 liter) of Waterhold concentrate will treat 2,000 to 3,000 sq. ft. (186 to 279 sq. m) of concrete surface. Waterhold is diluted with 9 parts of water to 1 part

of Waterhold concentrate, thus giving 10 gal. (37.8 liter) of material for each gal. (3.8 liter) of Waterhold. The diluted mixture will treat 200 to 300 sq. ft./gal. (4.9 to 7.4 sq. m/liter).

### 4. Technical Data

According to ACI 305, Hot Weather Concrete, plastic shrinkage cracking of concrete is probable whenever the evaporation rate exceeds 0.2 lbs./sq. ft./hr. (1.0 Kg/sq. m/hr.). Many combinations of air temperature, relative humidity, concrete temperature, and wind velocity can produce evaporation rates that exceed 0.2 lbs./sq. ft./hr. (1.0 Kg/sq. m/hr.). See figure 2.1.5 of the guide for a detailed nomograph. Below are some examples of environmental factors and the resulting evaporation rate.

Air Temp.	Relative Humidity	Concrete Temp.	Wind Velocity	Evaporation Rate
90°F (32°C)	30%	70°F (21°C)	25 mph (40 km/hr.)	0.20 lb./sq. ft./hr. (1.0 Kg/sq. m/hr.)
72°F (22°C)	50%	80°F (27°C)	25 mph (40 km/hr.)	0.38 lb./sq. ft./hr. (1.9 Kg/sq. m/hr.)
85°F (29°C)	50%	90°F (32°C)	10 mph (16 km/hr.)	0.20 lb./sq. ft./hr. (1.0 Kg/sq. m/hr.)
60°F (16°C)	20%	80°F (27°C)	25 mph (40 km/hr.)	0.50 lb./sq. ft./hr. (2.4 Kg/sq. m/hr.)
65°F (18°C)	20%	80°F (27°C)	15 mph (24 km/hr.)	0.35 lb./sq. ft./hr. (1.7 Kg/sq. m/hr.)
90°F (32°C)	60%	90°F (32°C)	15 mph (24 km/hr.)	0.25 lb./sq. ft./hr. (1.2 Kg/sq. m/hr.)
45°F (7°C)	10%	90°F (32°C)	5 mph (8 km/hr.)	0.20 lb./sq. ft./hr. (1.0 Kg/sq. m/hr.)

Use Waterhold any time the evaporation rate exceeds 0.20 lbs./sq. ft./hr. (1.0 Kg/sq. m/hr.) or when the slab begins to crust. Waterhold will not chemically retard the set of concrete surfaces.

### 5. Directions for Use

a. **Base Concrete:** Place, screed and bullfloat (or check rod) concrete to produce a smooth surface. As soon as these initial operations are complete, the slab is ready for Waterhold application.

b. **Dilution/Mixing:** Take Waterhold concentrate directly from container and dilute with 9 parts of water to 1 part concentrate. Mix or blend thoroughly to uniformly distribute the solids in the system. Where large

quantities will be needed, take a clean 55-gal. (208 liter) drum and add 5-gal. (18.9 liter) of Waterhold concentrate. Put in an additional 45 gal. (170 liter) of water and mix thoroughly.

**c. Application:** Pour or pump diluted Waterhold into a hand or power sprayer. Spray uniformly over the surface of the concrete until a translucent green sheen appears. Coverage rate is 200 to 300 sq. ft./gal. (4.9 to 7.4 sq. m/liter). Under severe drying conditions, reapply as needed. Normal checking of the concrete surface for timing on subsequent finishing operations should be maintained since Waterhold will not retard the set of the concrete surface. Waterhold may also be spray applied during finishing operations as a finishing aid.

**d. Clean Up:** Clean tools and equipment with Waterzall Concentrate and warm water.

## 6. Availability

Waterhold is normally available immediately from your local distributor or it will be shipped within 5 working days upon receipt of order. Please contact your local Metalcrete representative or call Metalcrete directly for more information.

## 7. Warranty

Waterhold is manufactured in strict accordance with the quality control standards of Metalcrete Industries. It is guaranteed to perform as indicated on this data sheet when applied by competent applicators.

## 8. Technical Service

Metalcrete technical service representatives are available to provide on-site assistance with a minimum three day notice.



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