



**packaging**

## self-leveling wear surface

### 1. Product Name

ASH GROVE® Self-Leveling Wear Surface  
Product Number: 440

### 2. Manufacturer

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### 3. Product Description

ASH GROVE® Self-Leveling Wear Surface is a precision blend specifically designed as a self-leveling and self-finishing concrete floor overlayment. Ideal for high use and wear areas such as parking decks, warehouses and factory floors. It produces a smooth and level floor surface that is extremely durable and lasting. Excellent wear and abrasion resistance results in a surface that is stronger and more resistant than original concrete.

#### BASIC USE:

Recommended for wear surfaces over concrete in:

- Parking Decks
- Factories
- Loading Docks
- Warehouses
- Garages

#### COMPOSITION & MATERIALS:

ASH GROVE® Self-Leveling Wear Surface is a polymer-modified portland cement based resurfacing material.

### 4. Advantages/Benefits

ASH GROVE® Self-Leveling Wear Surface has several advantages including:

- Self-leveling capabilities
- Interior or exterior use
- Wear surface
- Open to light traffic in four hours
- Pumpable
- Resistant to weather, freezing, thawing, mildew and water
- Stronger than concrete
- Greater abrasion resistance than concrete

### 5. Preparation

Clean area and remove all broken and loose concrete or foreign materials from the surface area to be repaired to ensure strong bond with the material. Rigorously and thoroughly roughen slick and sealed surface areas to be overlayed with a stiff brush.



Repair any areas over 1" depth with ASH GROVE® Vinyl Concrete Patch. Allow repair material to cure at least 3 hours before applying ASH GROVE® Bonding & Fortifier Admixture as a substrate primer.

Absorbent concrete will require 2 applications of diluted ASH GROVE® Bonding & Fortifier Admixture to avoid bubbles, pinholes, and reduce the flow of the overlayment. To determine whether 1 or 2 applications are needed, apply a 1:1 dilution of the ASH GROVE® Bonding & Fortifier Admixture and water to a test area. If the ASH GROVE® Bonding & Fortifier Admixture turns clear in approximately 30 minutes, 2 applications are required. Allow the first coat to dry before applying a second coat.

Prepare a test area using the same tools and procedures that will be used in the actual construction project. In a high traffic area install a minimum of 50 sq. ft. and allow curing for at least 3 days. Evaluate the test area for adhesion, appearance and suitability for the intended use.

Install a bond breaker where vertical surfaces meet the new topping and extend any existing expansion and control joints in the concrete through the topping cement.

Mix the ASH GROVE® Bonding & Fortifier Admixture in a 1:1 ratio with water. (1 gallon of ASH GROVE® Bonding & Fortifier Admixture diluted with 1 gallon of water will cover 500 to 800 sq. ft.) Apply the diluted ASH GROVE® Bonding & Fortifier Admixture with a soft push broom. A thin uniform application will perform more effectively than a thick film, which forms a soft rubber surface resulting in cracking of the overlayment.

### 6. Mixing Instructions

Mix only the amount that can be applied within 15 minutes using a high torque electric drill mixer with 450 RPM maximum. The mixture will remain fluid for about 15 minutes. As temperature rises above 70°F working time will decrease.

Add approximately 5 quarts of clean water to a mixing container for each 50 lb. bag of ASH GROVE® Self-Leveling Wear Surface.

Installations of less than 1,000 sq. ft. are usually done by the "mix and spill" method. This method involves mixing the material with a drill mixer – generally 2 bags at a time.

Once the water has been placed in the mixing container, gradually add the ASH GROVE® Self-Leveling Wear Surface material to the water. Mix for about 2 minutes until material is wet, free of lumps and of a flowable consistency. Over watering and over mixing will impact strength, abrasion resistance and may cause cracking or surface defects. In temperatures above 80°F, use cold water to retard the set.



## self-leveling wear surface (cont.)

For applications over 1,000 sq. ft., using a progressive cavity (rotor starter tube) is recommended.

For applications greater than 1", extend the ASH GROVE® Self-Leveling Wear Surface by adding up to 25 lbs. of clean, graded 1/8" damp aggregate per 50 lb. bag. Mix the product per instructions then add the aggregate. If aggregate is damp, no additional mixing water will be needed. If aggregate is dry, up to 1 pint of mixing water may be needed to obtain desired material flow consistency. The addition of aggregate reduces the working characteristics of the material. It may be necessary to apply a finish layer the next day as a final coat. ASH GROVE® Bonding & Fortifier Admixture must be applied before the finish layer of ASH GROVE® Self-Leveling Wear Surface.

### 7. Placement

Ideal placement temperatures are:

	Minimum	Maximum
Substrate	50°F	80°F
Mix	60°F	80°F
Air	50°F	90°F

Use a spreader tool to pull the ASH GROVE® Self-Leveling Wear Surface into place. Troweling is not recommended. Application thicknesses down to 1/16" are acceptable at points of termination. Most applications are 1/4" in thickness.

Divide the area to allow continuous placement without cold joints. To prevent ridges between batches, use the smoother tool and work a narrow dimension.

### 8. Curing

For proper curing protect the new surface from freezing and rain for 24 hours. Air and substrate temperatures will affect the working time and method of curing needed.

Materials modified with ASH GROVE® Bonding & Fortifier Admixture should be air cured, unless hot and/or drying winds or low humidity are present. Under such conditions, cure per *Portland Cement Association – Design and Control of Concrete Mixes (EB001.12 T)* and/or *American Concrete Institute 308 – Standard Practice for Curing Concrete*.

### 9. Technical Information

#### COMPRESSIVE STRENGTH:

ASTM C-109

- Air Cured 6 hours 1,700 psi
- Air Cured 24 hours 3,500 psi
- Cured 7 days 4,000 psi
- Cured 28 days 5,000 psi

#### SET TIME (Temp 70°F):

ASTM C-191

- Initial Set 2 to 3 hours
- Final Set 4 to 4½ hours

#### CURE TIME vs. MOISTURE CONTENT:

- 24 hours 14.6%
- 3 days 14.5%
- 7 days 13.2%
- 28 days 8.2%

### 10. Limitations

ASH GROVE® Self-Leveling Wear Surface will not correct or compensate for a structurally defective substrate. Faults in the substrate can appear in the wear surface. The use of alkali resistant glass fibers or galvanized metal reinforcing materials (Federal Specification QQL 101C) can be helpful in reducing reflective cracking.

Adhering to recommended water additions is very important. Exceeding the maximum recommended water content per bag will result in inferior physical properties.

A bonding agent such as ASH GROVE® Bonding & Fortifier Admixture is required for maximum adhesion to old concrete surfaces.

For applications greater than 1", do not use without adding up to 25 lbs. of 1/8" aggregate per 50 lb. bag.

Do not apply when temperatures are below 50°F or above 90°F.

Troweling is not recommended.

### 11. Coverage

One 50 lb. bag (22.68 kg) covers approximately 20 to 23 sq. ft. at 1/4" thickness.

### 12. Warning

ASH GROVE® Self-Leveling Wear Surface contains portland cement. Normal safety wear such as protective clothing, boots, rubber gloves, dust masks, eye safety glasses should be worn while handling cement-based products. Material Safety Data Sheets are available upon request or at [www.ashgrovepkg.com](http://www.ashgrovepkg.com).

### 13. Limited Warranty

This product meets or exceeds applicable ASTM standards in force at the time of packaging. Packager, having no control over the use of the material, does not guarantee finished work. Replacement of any defective product or refund of the purchase price of defective product shall be the buyer's sole remedy under this warranty.

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