



## packaging

# bonding & fortifier admixture



### 1. Product Name

ASH GROVE® Bonding & Fortifier Admixture  
Product Number: 411

### 2. Manufacturer

ASH GROVE PACKAGING GROUP  
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### 3. Product Description

ASH GROVE® Bonding & Fortifier Admixture is a water-resistant, multi-purpose liquid copolymer that can be used as a primer or admixture to improve the performance of cement patches and repairs. Mix directly into the repair material to increase adhesion, bond strength, tensile and flexural strength, and water and chemical resistance. Or apply as a bonding agent to substrate to increase adhesive strength of repairs, patches and coatings.

#### BASIC USE:

Mix directly into material as an additive or admixture to improve the mechanical properties of:

- Mortar
- Concrete
- Stucco
- Cement-Based Coatings
- Cement-Based Repair Products
- Plaster
- Tile Grout

Apply as a bonding agent or primer to increase adhesive and bonding strength of:

- Mortar
- Concrete
- Stucco
- Self-Leveling Products
- Cement-Based Coatings
- Cement-Based Repair Products
- Plaster
- Tile Grout

Also, recommended for use over:

- Concrete
- Tile
- Brick
- Block
- Stone
- Stucco
- Masonry

#### COMPOSITION & MATERIALS:

ASH GROVE® Bonding & Fortifier Admixture is a liquid copolymer used as a primer and/or admixture for cement based products.

### 4. Advantages/Benefits

ASH GROVE® Bonding & Fortifier Admixture has several advantages including:

- Can be used as a primer and/or admixture
- Increases bond strength of repairs for longer lasting repairs
- Increases flexural strength for added durability
- Suitable for use in vertical, horizontal or overhead repairs, indoor or outdoor applications, above or below grade surfaces
- Water-resistant
- V.O.C. compliant
- Improves hydration and curing
- Improves workability
- Concentrated to allow greater dilution
- Reimulsifiable

### 5. Preparation

Remove all broken and loose concrete and clean all grease, oil, paint, dust and any foreign substances from the surface area to be repaired to ensure strong bond with the material. Rigorously and thoroughly clean surface area with hot water and a stiff brush, leaving the surface saturated but free of standing water.

For optimum performance, apply during dry weather and when temperatures are between 50°F and 90°F. Weather conditions may affect quality and effectiveness of bond to concrete.

#### WHEN USING AS AN ADMIXTURE:

### 6. Mixing Instructions

Thoroughly mix ASH GROVE® Bonding & Fortifier Admixture prior to use.

Dilute ASH GROVE® Bonding & Fortifier Admixture with clean water according to the following rates. More concentrated dilutions may be required. A test area is strongly recommended.

Minimum Bonding & Fortifier Admixture to Water Dilution:

Stucco	1:2
Cement Repair	1:2
Plaster	1:2
Mortar Mixes	1:1
Sand Mixes	1:1
Concrete Mixes	undiluted

Add dilution to mixture and mix thoroughly according to product instructions. Do not over mix to avoid entrapping air. Place modified material and finish according to product instructions.



## bonding & fortifier admixture (cont.)

### WHEN USING AS A PRIMER:

#### 7. Mixing Instructions

Mix repair materials according to product instructions. For best results, use ASH GROVE® Bonding & Fortifier Admixture as an additive for the repair material in addition to using as a primer.

Use undiluted ASH GROVE® Bonding & Fortifier Admixture for maximum bonding strength or to meet ASTM C-1059 Type I and II and C-932 performance specifications. ASH GROVE® Bonding & Fortifier Admixture diluted with 1:1 water, may be used on sound substrates.

#### 8. Placement

Prior to application remove all standing water and apply with a brush, roller, or broom leaving a thin, uniform coating 4 to 6 wet mils thick depending on texture of substrate. A thin, uniform layer will perform better than a thick film, which tends to form a soft rubbery surface that may result in cracking of the new material. Porous surfaces may require a 2<sup>nd</sup> application.

#### 9. Curing

Allow the primer application to dry 1 to 3 hours to a clear film before application of repair material. Do not allow the primer to dry longer than 24 hours. Longer drying times will reduce the bond strengths. For proper curing, protect the new surface from water, rain, condensation, and freezing until the new material is applied.

Reapply primer if the application is permitted to dry longer than 24 hours or subjected to moisture prior to application of the repair material.

If the primer dries in less than 1 hour, the substrate is too porous and a second coat of primer is required.

#### 10. Technical Information

##### ASTM SPECIFICATIONS:

- Exceed requirements of ASTM C-1059 Type I and II and ASTM C-932 specifications when used as directed.

##### SHEAR BOND:

ASTM C-1059 over Cured Concrete

- Type I Bond Strength 490 psi (3.4 Mpa)
- Type II Bond Strength 1,360 psi (9.4 Mpa)

##### TENSILE STRENGTH:

ASTM C-932

- 7 days air 245 psi (1.7 Mpa)
- 7 days wet 193 psi (1.3 Mpa)

#### 11. Limitations

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

Do not allow accumulation into puddles.

Do not place when temperatures are below 50°F or above 90°F. Protect from freezing.

#### 12. Coverage

Coverage will vary depending on porosity and texture of the substrate.

As a Primer	4 wet mils
Undiluted (1 gal.)	400 sq. ft
Undiluted (1 qt.)	100 sq. ft

#### 13. Warning

ASH GROVE® Bonding & Fortifier Admixture contains Polyvinyl Alcohol and Ethylene Vinyl Acetate in Emulsion. Do not take internally. If accidentally ingested, seek immediate medical attention; do not induce vomiting and do not use syrup of ipecac. 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).

#### 14. Limited Warranty

This product meets or exceeds applicable ASTM C-1059 and ASTM C-932 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.

THIS LIMITED WARRANTY EXCLUDES ANY LIABILITY FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT OR SPECIAL DAMAGES.

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