



## packaging

# anchor set



### 1. Product Name

ASH GROVE® Anchor Set  
Product Number: 400

### 2. Manufacturer

ASH GROVE PACKAGING GROUP  
10816 Executive Center Drive, Ste. 100  
Little Rock, AR 72211  
Phone: (888) 289.1117  
Fax: (501) 224.3882  
[www.ashgrovepkg.com](http://www.ashgrovepkg.com)

### 3. Product Description

ASH GROVE® Anchor Set is a rapid-setting, pourable anchoring cement specifically formulated for setting and embedding anchor bolts, screws and other fixtures into concrete and masonry. ASH GROVE® Anchor Set expands as it hardens to fill voids within the anchor cavity and locks the anchor firmly, rigidly and permanently in place. It sets hard in 10-20 minutes, reaches exceptional strengths.

#### BASIC USE:

Recommended for installation or repair of concrete surrounding:

- Railings
- Ornamental Iron
- Machinery
- Anchor Bolts
- Conduits
- Pipes
- Banisters

#### COMPOSITION & MATERIALS:

ASH GROVE® Anchor Set is an expansive polymer modified, calcium aluminate cement based product.

### 4. Advantages/Benefits

ASH GROVE® Anchor Set has several advantages including:

- Ability to expand while setting and set in 20 minutes
- High early strength
- Strong bond to existing concrete and masonry surfaces
- Suitable for use in vertical, horizontal or overhead repairs, indoor and outdoor applications
- Non-corrosive, non-metallic, and non-rusting
- Water resistant and freeze & thaw resistant

### 5. Preparation

Prepare a hole for the anchor bolt. The depth of the hole should be at least 8 times the diameter of the anchor bolt and the width should be 3 times the diameter of the anchor

bolt. For best results, taper the hole slightly wider at the bottom than at the top to improve pull-out resistance levels.

All surfaces that will be in contact with ASH GROVE® Anchor Set must be entirely free from dirt, dust, loose materials, unsound concrete, or any other foreign substances which may interfere with the bond of the material. Prior to application dampen the interior of the hole and clean thoroughly with potable water, leaving the surface saturated but free of standing water.

### 6. Mixing Instructions

Add ASH GROVE® Anchor Set to the required amount of water while mixing thoroughly and quickly. Consistency and strength of the material depends upon the amount of water used. The maximum recommended amount of water for a flowable, pourable mixture is 3 oz. per 5 lbs. of ASH GROVE® Anchor Set.

ASH GROVE® ANCHOR SET	WATER
5 lb.	3 oz.
10 lb.	6 oz.
50 lb.	30 oz.

For trowel consistency, use slightly less water. Mix only what can be applied within 10 minutes. Do not add additional water to the mixture after 2 minutes.

### 7. Placement

Center the anchor in the hole and pour the material evenly around the anchor. Taper the material up and around the anchor to prevent water from collecting at the base.

Large pipes or railings may require temporary bracing to ensure post stays in position and remains undisturbed until ASH GROVE® Anchor Set has achieved final set.

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

### 8. Curing

Allow ASH GROVE® Anchor Set to cure for 3 to 4 hours before light use. Cure 12 to 24 hours before moderate to heavy use.

Once the ASH GROVE® Anchor Set has achieved final set, apply ASH GROVE® Cure & Seal to prevent evaporation of moisture and provide protection against weather conditions. If applicable, remove temporary bracing. (Note: ASH GROVE® Cure & Seal is not recommended for use under cold weather conditions.)



## anchor set (cont.)

### 9. Technical Information

#### ASTM SPECIFICATIONS:

- Meets requirements of ASTM C-387 specifications when used as directed.

#### COMPRESSIVE STRENGTH:

ASTM C-109

- 1½ hours 2,000 psi (13.8 Mpa)
- 24 hours 8,000 psi (55.2 Mpa)
- 7 days 10,000 psi (69.0 Mpa)
- 24 days 11,000 psi (75.8 Mpa)

#### SET TIME:

ASTM C-191

- Initial Set 20 minutes
- Final Set 30 minutes

#### EXPANSION:

ASTM C-827 +0.10%

#### LENGTH CHANGE:

ASTM C-157

- Air Cured +0.10%
- Moist Cured +0.05%

#### PULL-OUT STRENGTH:

ASTM C-900

- ¾" Bolt 10,000 lbs. Total Load
- 1" Bolt 14,000 lbs. Total Load

### 10. Limitations

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

Do not mix more material than can be used within 10 minutes.

Do not add additional water to the mixture after 2 minutes.

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

A bonding agent such as ASH GROVE® Bonding & Fortifier Admixture is recommended for maximum adhesion to old concrete surfaces or for a protective coating of anchors in installations subject to corrosion.

### 11. Coverage

One 10 lb. bucket (4.54 kg) yields approximately 145 cu. in.

0.42 cu. ft. 50 lb. bucket (22.68 kg)  
145 cu. in. 10 lb. bucket (4.54 kg)

### 12. Warning

ASH GROVE® Anchor Set contains cement and sand. 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 C-387 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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