



## rip rap

### 1. Product Name

ASH GROVE® Rip Rap  
Product Number: 307

### 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® Rip Rap is a highly effective packaged concrete mix for controlling soil erosion. ASH GROVE® Rip Rap is specially packaged in an environmentally friendly biodegradable bag. Bags may be placed flat and overlapped or stacked along embankments, slopes, drainage ditches and storm sewers for stormwater and erosion control. The biodegradable packaging weathers and degrades over time to reveal a solid, durable and attractive "cobblestone" tiered barrier with high structural integrity.

#### BASIC USE:

Recommended erosion control or for construction of:

- Embankments
- Drainage Ditches
- Retaining Walls
- Garden Walls
- Garden Paths

#### COMPOSITION & MATERIALS:

ASH GROVE® Rip Rap is a uniformly blended mixture of portland cement and graded aggregates packaged in biodegradable brown paper bags.

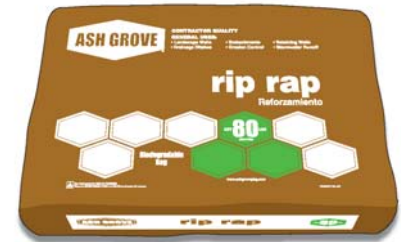
### 4. Advantages/Benefits

ASH GROVE® Rip Rap has several advantages including:

- Easy to use and place into position
- Fast installation
- Eliminates need for forms, mixing or finishing
- High strength durability
- Efficient transport and handling
- Uniform blending, quality controlled strengths
- Uniform size, attractive finish and appearance

### 5. Preparation

The foundation on which the bottom layer of ASH GROVE® Rip Rap will be installed should be solid and free of loose material. No special site preparation, other than rough grading and leveling, is required.



### 6. Mixing Instructions

No mixing is required. Leave the material inside the biodegradable bags as packaged. Moisture penetrates the bag over time to harden.

### 7. Placement

Lay the first layer of bags for the wall with the large flat side down and butt the ends together. Stack succeeding layers in a running bond pattern with ends butted together and overlapping ½ of the bag. Due to the fact that the bags are not firm when placed, they will follow the natural contour of the land, forming a secure, tight interlock for better erosion control.

After each layer of bags has been placed, puncture the top of the bags and soak them with water. Doing so will accelerate saturation and initial set. The bags are biodegradable and will break down into pieces over time, leaving the polyester interior lining for support.

For additional stability or increased wall strengths, steel reinforcing rods or pins may be driven through the bags to anchor them to the slope or to secure the bags together.

Walls higher than 10 feet should be temporarily sway-braced with 2x4's to facilitate and support initial set.

### 8. Curing

The bags of ASH GROVE® Rip Rap will continue to set and harden through absorption of natural moisture in the air and ground.

### 9. Technical Information

The material can be packaged to meet DOT requirements. Typical standards for formulation can be provided upon request.

### 10. Limitations

For best results:

- Avoid doing the job when the temperature is at or near freezing.
- Work should be completed with as little interruption as possible to assure integral construction.
- Materials should be kept wet 4 days to assist curing, although natural moisture alone is enough to set.
- For walls over 10 feet use 2x4 as a temporary brace.

### 11. Coverage

When filled, each bag of ASH GROVE® Rip Rap measures approximately 17 inches wide, 19.5 inches long and 5 inches thick. 25 bags will lay a wall 8 feet long and 2 feet high.



## rip rap (cont.)

For a vertical wall with ASH GROVE® Rip Rap bags, place one bag on top of another and butt end to end, multiply the wall area in square feet by 1.50 for the number of bags required. *Example: If area to cover is 5 feet x 20 feet or 100 square feet, then multiply 100 square feet by 1.50 to get 150 bags.*

To deduct the area of drain pipes going through the wall, refer to the following chart for the area to be deducted.

Diameter of Pipe (feet)	Square Feet
2	3.14
3	7.07
4	12.56
5	19.63
6	28.26
8	50.24
9	63.59
10	78.50

When estimating bag requirements for a flat or sloped area with bags placed side by side and end to end, multiply the area in square feet by 0.60 for the number of bags needed. *Example: If area to cover is 30 feet x 30 feet or 900 square feet, then multiply 900 square feet by 0.60 to get 540 bags.*

### 12. Warning

ASH GROVE® Rip Rap contains portland 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

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.

EXCEPT FOR THE LIMITED WARRANTY MADE ABOVE, PACKAGER SPECIFICALLY DISCLAIMS AND EXCLUDES ANY OTHER EXPRESS WARRANTY, ANY IMPLIED WARRANTY OF MERCHANTABILITY OF GOODS AND ANY IMPLIED WARRANTY OF FITNESS OF GOODS FOR ANY PARTICULAR PURPOSE.