



packaging

portland I, I/II & III cement



1. Product Name

ASH GROVE® Portland I, I/II & III Cement
Product Number: 100 Type I Normal
110 Type II Moderate Sulfate Resistance
115 Type III High Early Strength

2. Manufacturer

ASH GROVE PACKAGING GROUP
10816 Executive Center Drive, Ste. 100
Little Rock, AR 72211
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www.ashgrovepkg.com

3. Product Description

ASH GROVE® Portland I, I/II & III Cement may be mixed with aggregates to form a premium concrete, mortar or stucco mix. Type I and Type I/II cements are suitable for most concrete applications. Type III provides a higher early strength required in some applications and is excellent for use in cold weather conditions.

BASIC USE:

Recommended for construction applications requiring:

- Concrete Mix
- Mortar Mix
- Stucco Mix
- Precast
- Parging

COMPOSITION & MATERIALS:

ASH GROVE® Portland I, I/II & III Cement are high quality, general purpose portland cements formulated and manufactured for a wide variety of concrete construction applications. Type III is chemically and physically similar to Type I cement, except that its particles have been ground finer.

4. Mixing Instructions

Portland cement is designed for combining with sand, gravel and water to produce concrete, mortar and stucco mixes. Below are the ratios of ingredients needed to make each mix.

For Concrete Mix (ASTM C-387):

Mix 1 part ASH GROVE® Portland Cement, 2 parts ASH GROVE® All-Purpose Sand*, and 3 parts ASH GROVE® All-Purpose Gravel*. Sand and gravel should meet ASTM C-33 specifications.

For Mortar Mix (Type S ASTM C-270):

Mix 1 part ASH GROVE® Portland Cement, ½ part Lime, and 3½ to 4½ parts Mortar Sand. Lime should be Type S and sand should meet ASTM C-144 specifications.

For Stucco Mix (ASTM C-926):

Mix 1 part ASH GROVE® Portland Cement, ½ part Lime, and 4½ to 6 parts Plaster Sand. Lime should be Type S and sand should meet ASTM C-897 specifications.

Then add adequate amounts of water to the dry mixture to achieve desired workability and consistency. Avoid a 'soupy' mix; too much water will weaken the concrete, mortar and/or stucco mix.

The mixture should be mixed for 3 to 5 minutes after all materials are in the mixer. Use of a machine mixer is recommended to ensure all ingredients are thoroughly combined.

5. Technical Information

ASTM SPECIFICATIONS:

- Meets requirements of ASTM C-150 specifications when used as directed.

6. Limitations

Adhering to recommended amounts for ASH GROVE® Portland Cement, Sand, Gravel and/or Lime is very important to ensure superior physical properties.

7. Coverage

TYPE I:

92.6 lb. bag (42.0 kg)
47 lb. bag (21.32 kg)
30 lb. bag (13.61 kg)

TYPE I/II:

92.6 lb. bag (42.0 kg)

TYPE III:

92.6 lb. bag (42.0 kg)

8. Warning

ASH GROVE® Portland I, I/II & III Cements contain 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.

9. Limited Warranty

This product meets or exceeds applicable ASTM C-150 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.



portland I, I/II & III cement (cont.)

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

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