

# BORAL ULTRA POZZ

Silica Fume  
ASTM C 1240

## PRODUCT DESCRIPTION

**Boral Ultra Pozz** is a pozzolanic material that is recovered from the exhaust furnaces producing silicon metal and other silicon alloys. The sub-micron particles are dispersed into the spaces around and between cement grains, leading to a uniform distribution of hydration products and a dense micro-structure.

### Basic Applications

**Boral Ultra Pozz** can be used to produce High Performance Concrete with high strengths and very low permeability. Structures requiring longer clear spans and slender columns benefit from the use of Boral Ultra Pozz as well as applications requiring high durability in severe exposure conditions.

### Composition and Materials

- **Boral Ultra Pozz D** is a dry, densified form of silica fume, which maximizes handling efficiency and provides a uniform dispersion throughout the concrete mixture. Boral Ultra Pozz D contains 92-95% silica.

### Limitations

Differences of materials used in producing concrete vary from region to region. Therefore, Boral recommends the specifications permit the concrete producer, using admixture manufacturer's recommendations, to select the mix proportions that provide the project's performance requirements with the local materials available.

## RECOMMENDED INSTALLATION

### Applicable Standards

- ASTM C 1240
- **Boral Ultra Pozz** meets or exceeds all applicable standards required by ASTM and the individual state transportation agencies within the states that the material is sold. Individual physical and chemical properties are analyzed and certified by independent laboratories. These results are available by contacting the Boral sales office in your area.

### Recommended Proportioning

**Boral Ultra Pozz** is generally used at an addition rate of 5-12 percent by weight of the cement. The specific quantity is dependent upon project requirements and shall be determined by trial mixes with local materials. Consult a Boral representative for guidance. The use of fly ash in combination with **Boral Ultra Pozz** is also recommended to achieve optimum results.

**Boral Ultra Pozz** is added to the concrete mixture along with portland cement, fine and coarse aggregates, water and chemical admixtures. Proper proportions of each constituent should be determined by trial batches prior to use in the field.

### Compatibility

**Boral Ultra Pozz** is compatible with Boral Fly Ash and other chemical admixtures. However, to avoid possible chemical interactions and to achieve maximum performance, admixtures must be added separately to the concrete mixture.

### Precautions

Normal safety precautions are advised when handling this material. Dampen with a water mist to control airborne dust and use appropriate personal protective equipment to avoid inhalation and exposure to eyes, skin and mucus membranes. Excessive exposure to materials may cause irritation of the eyes, skin and mucus membranes and chronic exposure could lead to fibrotic disease of the lungs. This product contains silica, which has been identified as a carcinogen. If contact is made, areas affected should be thoroughly flushed with water. Medical attention is advised in case of ingestion, inhalation or eye contact. A Material Safety Data Sheet is available by contacting Boral or going to [www.boralmti.com](http://www.boralmti.com).

## AVAILABILITY AND COST

**Boral Ultra Pozz** is available to concrete producers throughout the United States. Price information is available through Boral sales offices.

## PACKAGING INFORMATION

**Boral Ultra Pozz D** is available in bulk or 25-lb. repulpable bags.

## WARRANTY DISCLAIMER

**Boral Material Technologies Inc. disclaims warranty of merchantability and warranty of fitness for a particular purpose.**

In addition, because Boral Material Technologies Inc. cannot control the final use of its products, there are no warranties expressed or implied regarding a product's use or performance in any given circumstance. Persons receiving this information should make their own tests to determine suitability for their particular use.

Boral Pozzolans are guaranteed to meet the requirements of the specifications prescribed herein, when used and batched in accordance to manufacturer recommendations. As, the overall performance of a concrete mixture is related to a complex matrix of materials and since many factors can affect the performance of concrete, Boral Material Technologies Inc. reserves the right to determine the actual cause of a concrete problem.

## TECHNICAL SERVICE

- Technical service is available by contacting Boral Engineering Support Services or a Boral sales office.
- Technical services can be provided via telephone, e-mail, fax, in your office or at the jobsite.
- Boral representatives are available as a technical resource for Boral Product information, as well as other concrete related areas such as: concrete mix design, placement and curing techniques.

## Regional Sales Offices

Florida  
1-800-329-6337

Georgia  
1-800-241-4943

North Carolina  
1-800-822-8896

California  
1-800-864-4521

Colorado  
1-800-255-0663

Arizona  
1-800-528-6630

Texas  
1-800-292-5354

\*Engineering Support Services location

