

## 1. Product Name

- Portland/Slag Blended Cement (MaxCem)

## 2. Manufacturer

Holcim (US) Inc.  
6211 North Ann Arbor Road  
P.O. Box 122 Dundee, MI 48131  
Phone: 888-646-5246  
734-529-2411  
Fax: 734-529-4110  
E-mail: [ask@holcim.com](mailto:ask@holcim.com)  
Web: [www.holcim.us](http://www.holcim.us)

## 3. Product Description

### Basic Use

Portland/Slag Blended Cement (MaxCem) which contains some portion of pre-consumer recycled materials, is manufactured to maximize eco-efficiency. Use of these materials may contribute to achieving points or credits in LEED® or other green building assessment systems.

Portland/Slag Blended Cement is a building material which is used in a wide variety of commercial and architectural concrete construction applications. Concrete made with Portland/Slag Blended Cement using the proper mix design can be resistant to the attack of harsh environmental influences, such as frost and de-icing chemicals

### Uses include:

- Cast-in-place
- Precast
- Tilt-up
- Roads
- Bridges
- Pipe
- Masonry and Mortar
- Concrete Masonry Units (CMU)
- Grouts

### Types

MaxCem Portland/Slag Blended Cement is produced to meet the requirements of ASTM C 595 (Type IS) and AASHTO M 240 (Type IS) for Portland/Slag blended cements.

### Benefits

- Formulated to provide consistent strength, workability and durability
- Meets the requirements of ASTM C595
- Meets the requirements of AASHTO M 240



Portland/Slag Cement Construction—Wind Turbine Base

### Limitations

There are many variables beyond the control of the cement manufacturer that affect concrete performance. Good concreting practices are required in order to achieve desired results. Attention must be given to formwork, batching, mixing, placing, finishing and curing. In special applications, selection of aggregates, admixtures and additives may need to be.

### Composition and Materials

The primary ingredients of MaxCem Portland/Slag Blended Cement are Portland cement or clinker, granulated blast-furnace slag (GBFS), and gypsum, ground to a fine powder that, when mixed with water, sets and hardens into a solid monolithic mass. The hydration of calcium silicates forms a gel-like material called calcium silicate hydrate. All Portland/Slag Blended Cement manufacturing is quality controlled to ensure product performance and uniformity.

### Sizes

MaxCem Portland/Slag Blended Cement can be shipped by bulk rail and truck quantities measured in tons.

## 4. Technical Data

### Applicable Standards

ASTM International

- **ASTM C 595 (Type IS)** Standard Specification for Blended Hydraulic Cements
- **American Association of State and Highway Transportation Officials (AASHTO)**
- **AASHTO M 240 (Type IS)** Standard Specification for Blended Hydraulic Cements

### Physical/Chemical Properties

Portland/Slag Blended Cement is formulated to help provide consistent strength, durability and workability as well as finished product appearance.

## 5. Installation

### Methods

Concrete is a structural material consisting of hard, chemically inert material (usually sand and gravel) bonded together by cement and water (paste is composed of Portland/Slag Blended Cement, water and, if required, entrained air for freeze/ thaw durability). The character of structural concrete is largely determined by the water-cement ratio. The amount of cement in relation to the amount of aggregate is also critical to a durable, strong concrete.

Freshly mixed (plastic) and hardened properties of concrete can be changed by adding chemical and mineral admixtures to concrete during batching. These admixtures are used to:

- Adjust setting time and/or hardening rate
- Reduce water demand
- Increase workability
- Entrain air
- Adjust other concrete properties

Good concreting practices are required for proper, durable, strong concrete. Proper proportioning, batching, mixing, placing, consolidating, finishing and curing, as well as proper subgrade preparation, formwork, uniform slump and other techniques are critical to achieving the desired results.

Freshly mixed concrete should be plastic or semifluid and moldable.

Portland/Slag Blended Cement is manufactured under controlled conditions and laboratory tested to ensure consistent quality and uniformity. Never change sources or proportions during a construction project.

### Precautions

Direct contact with the skin should be avoided. If contact occurs, the skin should be washed with water as soon as possible. Exposure of sufficient duration to wet Portland/Slag Blended Cement can cause serious, potentially

irreversible tissue destruction in the form of chemical (caustic) burns. If Portland/Slag Blended Cement gets into the eyes, immediately rinse them thoroughly with water and seek medical attention. For more complete information, reference is made to the applicable Safety Data Sheets (SDS), which should be consulted prior to use of this product. These SDS are available at [www.holcim.us](http://www.holcim.us).

## 6. Availability and Cost

Availability: Portland/Slag Blended Cement is available throughout most of the United States.

Cost: Pricing information can be obtained from the nearest Holcim US Sales Office.

## 7. Warranty

Upon request, Holcim US can provide Material Certification reports demonstrating that MaxCem Portland/Slag Blended Cement meets applicable ASTM standards. Holcim will not guarantee finish work, having no control over use of this product. Holcim shall not be responsible for condition of cement after delivering to dealer or distributor.

## 8. Maintenance

In areas where concrete cleaners and sealers are required, proper instructions should be followed. Contact the appropriate product manufacturer before application.

## 9. Technical Services

Technical service is available by contacting the nearest Holcim Sales Office at (888) 646-5246. With advance notice, technical service can be provided at jobsite locations.

For questions on any technical information contained in this document, contact a Holcim Technical Service Engineer for further detail.

## 10. Filing Systems

Additional product information is available from the manufacturer. Controlled conditions and laboratory tested to ensure consistent quality and uniformity. Never change sources or proportions during a construction project.

### Precautions

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### Corporate Headquarters

Holcim US  
8700 Bryn Mawr Avenue  
Chicago, IL 60631  
(888) 646-5246

### Corporate Office

6211 Ann Arbor Road  
P.O. Box 122  
Dundee, MI 48131  
(888) 646-5246