

## Lightweight Cement

### Product Overview

Our Lightweight Cement Blend is comprised of inter-grinding a Portland Cement clinker with exclusive lightweight components. By reducing the amount of Portland cement clinker, it reduces the amount of carbon dioxide released in the production of the cement. It is intended to be mixed at densities between 12.0 and 14.2 lbs/gal by adjusting the mix water ratio without addition of “extending” additives.

### Features & Benefits

Lightweight Cement has a low Specific Gravity excellent strength and a lower CO<sub>2</sub> Production. Strength is greater and permeability is less than for slurries mixed using lightweight additives. CPI's Lightweight Cement is compatible with all conventional additives used with Portland cement.

- Density easily varied 12.0 – 14.2 lb/gal
- Flexibility in design.
- Application in conditions requiring low density, low permeability, high strength.
- Good base for other low density cements such as foamed cement or other ultra-light cement.
- More environmentally friendly.

### Specifications

Dry Volume – 75 lb/ft<sup>3</sup> (sack)  
 Absolute Volume – 3.22 gal/sack (75 lb)  
 Specific Gravity – 2.80  
 Blaine Fineness – 8200 ± 300 cm<sup>2</sup>/g  
 Passing 325 mesh – +97%

### Chemical Analysis

|                                |           |
|--------------------------------|-----------|
| SiO <sub>2</sub>               | 34.9%     |
| CaO                            | 38.8%     |
| Al <sub>2</sub> O <sub>3</sub> | 10.7%     |
| Fe <sub>2</sub> O <sub>3</sub> | 5.5%      |
| MgO                            | 1.6%      |
| SO <sub>3</sub>                | 4.1%      |
| Na <sub>2</sub> O              | 1.3%      |
| CaO:SiO <sub>2</sub>           | Ratio 1:1 |

### Mixing Ratios

| Density<br>(lb/gal) | Yield<br>(ft. <sup>3</sup> /) | Mix<br>Water<br>(gal/sk) |
|---------------------|-------------------------------|--------------------------|
| 14.2                | 1.10                          | 5.00                     |
| 13.5                | 1.2                           | 6.11                     |
| 13.0                | 1.3                           | 7.10                     |
| 12.5                | 1.55                          | 8.35                     |
| 12.0                | 1.7                           | 9.95                     |

### Shipping, Handling & Storage

Available in 2000lb. supersacks.  
 Bulk transport also available.

The information contained herein is based on data considered accurate with representative samples. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. The above data does not imply specifications for this product. CPI assumes no responsibility for personal injury or property damage to vendees, users or third parties, caused by the material. Such vendees or users assume all risks associated with the use of the material. Consult the Material Safety Data Sheet before using this product.