

# Royal El Minya White Cement

## Masonry C-91

Masonry C-91 refers to the ASTM C91 standard, which specifies requirements for masonry cement used in mortar applications. This standard covers three types of masonry cement and provides guidelines on measurement units, safety considerations, and compliance with international standardization principles.

### Advantages

- Excellent workability – Enhances ease of application and consistency.
- Superior durability – Ensures long-lasting masonry structures.
- Consistent color – Helps maintain uniformity in construction.
- Water retention – Improves bonding and reduces shrinkage.

### Applications

- Brick and block masonry – Used for constructing walls, foundations, and other structural elements.
- Stucco and plastering – Provides a durable and smooth finish for exterior and interior surfaces.
- Purging – Applied to masonry walls for additional protection and aesthetics.
- Repair work – Used for patching and restoring damaged masonry structures.

### Cement Composition

- Clinker: 55 - 60%
- Minor Additional Constituents: 40 - 45%

### Storage Conditions

- Valid if it stored in good conditions.
- Recommended to retest after 6 weeks of packing.



### Chemical, Physical & Mechanical Properties

| Item                                                                                             | Royal White Cement<br>Typical Value | Standard<br>rd Limit |
|--------------------------------------------------------------------------------------------------|-------------------------------------|----------------------|
| Fineness, residue on a 45-µm (No. 325) sieve, max, %                                             | 11.0 - 13.0                         | ≤ 24.0               |
| Autoclave expansion, max, %                                                                      | 0.04 - 0.06                         | ≤ 1.0                |
| Initial Setting (min.)                                                                           | 150± 20                             | ≥ 120                |
| Air content of mortar, prepared and tested in accordance with requirements of this specification | 16.0 ±2.0                           | ≥ 8.0 ≤21.0          |
| Water retention value, min, % of original flow                                                   | 74.0 – 72.0                         | ≥ 70.0               |
| 7 Days Compressive Strength (PSI)                                                                | 850                                 | ≥500                 |
| 28 Days Compressive Strength (PSI)                                                               | 1400                                | ≥900                 |

### Packaging & Shipping Options

- Bulk Transport:
  - Delivered in tanker trucks for large construction sites.
- Jumbo Sacks:
  - 1.5 ton bags for medium-scale applications.
- Drums:
  - Occasionally available for specialized industrial use.

Manufacturer: Royal El Minya Cement, Egypt  
A leading global manufacturer of high-quality white cement, exporting to 55+ countries worldwide.

