

Type HE High-Early-Strength Portland Cement

(formerly named Type 30 High Early Strength)

1. Product Description

Basic Use: Lehigh Type HE cement is special purpose hydraulic cement producing higher early strengths relative to Type GU cement. It has been formulated for use in concrete, grouts, and mortars.

Colour: Lehigh Type HE cement has no artificial colours added and has a normal colour of light gray.

Limitations: Lehigh Type HE cement is hydraulic cement requiring water to harden. It should be used in an environment that is free of acids and sulphate. Caution should be exercised when used in warm environments as unwanted cracking may develop.

2. Technical Data

Applicable Standards: Lehigh Type HE cement is manufactured to conform to **CAN/CSA-A3000-03 "Cementitious Materials Compendium" A3001-03**, the Cementitious Materials for Use in Concrete.

Physical Properties: Type HE High Early Cement is a fine gray powder.

Strength: According to CAN/CSA-A3001, mortar cubes made with Type HE high early strength cement will obtain minimum strengths as listed below:

1 day	-	13.5 MPa
3 days	-	24.0 MPa

Setting Time: According to CAN/CSA-A3001, a paste made with Type HE High Early Strength cement will attain an initial set in a minimum of 45 minutes, and a final set in a maximum of 250 minutes, when tested in accordance with the Vicat method.

Specific Gravity: Type HE Normal Portland Cement typically has a specific gravity of 3.15.

3. Safety and Handling

Cement and wet cement mixtures can dry the skin, cause alkali burns and irritate the eyes and upper respiratory tract. Ingestion can cause irritation of the throat. When working with cement and cement mixtures, workers should wear gloves and clothing impervious to moisture. Further safety measures should include; dust masks, safety goggles and barrier cream for exposed skin.

4. Availability

Lehigh Type HE cement is available either in 40 kg paper sacks or in bulk. Custom packaging may be available for selected large quantities.

5. Warranty

Lehigh Northwest Cement Limited warrants that Lehigh Type HE cement meets the requirements of **CAN/CSA-A3000-03 "Cementitious Materials Compendium" A3001-03**.

6. Product Storage

All cement must be stored in a dry weather tight enclosure. Bagged material must be stored on pallets, which allows air circulation around them.

7. Technical Services

Technical information and services are available from Lehigh Northwest Cement Limited.