Type III, High-Early-Strength, Portland Cement

1. Product Description

**Basic Use:** Lehigh ASTM Type III (AASHTO TYPE III), low alkali, Portland cement is a special purpose hydraulic cement that produces higher early strengths relative to a normal Type I-II Portland cement. Type III Portland cement is formulated to be used in grouts, mortars and concrete.

**Color:** Lehigh Type III cement has no artificial colors added and has a normal color of light gray.

**Limitations:** Lehigh Type III, low alkali Portland cement is designed to be mixed with water. It should be used in an environment that is free of acids and sulfates. Caution should be exercised when used in warm environments as unwanted cracking may develop.

2. Technical Data

**Applicable Standards:** Lehigh Type III, low alkali, Portland cement is manufactured to conform to ASTM C150 and AASHTO M85 specifications for low alkali, Type III Portland cement

**Physical Properties:** Type III Portland Cement is a fine grey powder.

**Strength:** According to ASTM C150 and AASHTO M85, mortar cubes made with Type III Portland cement will obtain minimum strengths as listed below:

<table>
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<tr>
<th>Time</th>
<th>Strength</th>
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<tr>
<td>1 day</td>
<td>1740 psi (ASTM), 1930 psi (AASHTO)</td>
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<tr>
<td>3 days</td>
<td>3480 psi (ASTM + AASHTO)</td>
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**Setting Time:** According to ASTM C150 and AASHTO M85, a paste made with Type III Portland cement will attain an initial set in a minimum of 45 minutes, and a final set in a maximum of 375 minutes, when tested by the Vicat method.

**Specific Gravity:** Type III 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 III cement is available in either 94 lb. paper sacks or in bulk. Custom packaging may be available for selected large quantities.

5. Warranty

Lehigh Northwest Cement Company warrants that Lehigh Type III cement meets the requirements of ASTM C150 – Type III Portland cement and AASHTO M85 – Type III Portland cement.

6. Product Storage

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

7. Technical Services

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