

October 18, 2019

43rd Street, Inc. One 43rd Street Pittsburgh, PA 15201 Lehigh Cement Company, LLC 675 Quaker Hill Road Union Bridge, MD 21791 Phone: 1-800-638-1716 Fax: (410) 386-6316 www.lehighhanson.com

JOB:

GENERAL CONTRACTOR: MASONRY CONTRACTOR: ARCHITECT:

To whom it may concern:

Lehigh Cement Company, LLC certifies that at time of shipment, masonry cement designated as **Type S** manufactured at the **Union Bridge** plant conforms to the **standard** physical requirements of the current Standard Specification for Masonry Cement of ASTM C 91 for **Type S** masonry cement.

Accordingly, the designated cements may be used in preparation of ASTM C 270 Type S mortar without further addition of cements or hydrated lime.

This certification is limited to the language above and carries no other express or implied warranties or representations. This certification is applicable for the calendar year 2019.

Yours Truly,

Bundan Skeet

Brandon Eckard

Quality Control Manager



HEIDELBERGCEMENTGroup

Mill Test Certificate Report

Type: Masonry S

Test Period:

07-Jul-2019

To:

30-Sep-2019

Certification

Lehigh Cement Company, LLC certifies that at time of shipment, masonry cement designated as Type S manufactured at the Union Bridge, Maryland plant conforms to the standard physical requirements of the current Standard Specification for Masonry Cement of ASTM C 91 for Type S masonry cement. This certification carries no other express or implied warranties and Lehigh Cement Company LLC, is not responsible for improper use or workmanship of the described cement.

General Information

Supplier: Lehigh Cement Company LLC

Address: 675 Quaker Hill Rd.

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Union Bridge, Md. 21791

Source Location:

Union Bridge Plant

Contact:

Customer Service

Telephone:

800-638-1716

| Test Data on ASTM Physical Requirements | | |
|---|--------------------------------------|--------------|
| item | Limit | Result |
| Fineness, residue on a 45 μm (No. 325) sieve, % | not more than 24 | 1 |
| Autoclave Expansion, % | not more than 1.0 | 0.1 |
| Initial time of setting by Gillmore, minutes | not less than 90, not more than 1000 | 252 |
| Compressive Strengths, MPa | | |
| 7 days, MPa | not less than 9.0 | 13.9 |
| 28 days, MPa | not less than 14.5 | 17.7 |
| Compressive Strengths, psi | <u> </u> | 10 |
| 7 days, psi | not less than 1300 | 2,014 |
| 28 days, psi | not less than 2100 | 2,563 |
| Air Content of Mortar, % | not less than 8, not more than 19 | 17 |
| Water Retention Value, % of original flow | not less than 70 | 77 |
| Not | es | Long Barrier |

10/16/19 Date B. Eclaud

Quality Control Supervisor: Brandon Eckard