



SUPERCAP[®]
The Next Generation Slab[®]

**LATICRETE[®] SUPERCAP[®]
Respirable Silica Air Sampling Report
March 1, 2017**

Executive Summary:

Background: In March 2016, OSHA published a new rule to improve U.S. workers' protection from the dangers of respirable silica dust. The rule will increase the safety and health of construction workers by decreasing the permissible exposure to respirable crystalline silica (dust) from 250 to 50 micrograms per cubic meter of air, averaged over an eight-hour shift. The new rule takes effect in the U.S. construction industry June 23, 2017.

Research Objective: Given the changing regulatory environment, LATICRETE SUPERCAP commissioned a study to analyze workers' exposure levels to respirable crystalline silica when using the LATICRETE SUPERCAP System to install its SC500 self-leveling underlayment.

Methodology: The study was conducted by Fuss & O'Neill Manufacturing Solutions, an independent industrial hygiene consultant. Fuss & O'Neill was commissioned to assess the airborne levels of respirable silica for workers and the surrounding building areas during a LATICRETE SUPERCAP SC500 installation on October 25, 2016 at the Boston University facility under construction at 610 Commonwealth Avenue.

The applicator, Allegheny Contract, installed SUPERCAP SC500 on the 8th floor of the building. A LATICRETE SUPERCAP Mobile Blending Unit (MBU) at ground level was used to mix SC500 Concentrate with sand and water according to the project's specifications, and then hydraulically pump it up in a hose to workers on the 8th floor who were responsible for the project installation.

Four (4) air sampling pumps and filters were used to gather any respirable silica components (quartz and cristobalite) present in the workers' breathing zones. Two of these pumps were hung on workers installing the SLU inside the building's 8th floor, and two of these pumps were hung on workers outside the building and operating the pump truck.

In addition, two more pumps and filters were used to gather samples in areas adjacent to the SUPERCAP pour on the building's 8th floor.

Results: Some of the significant findings from Fuss & O'Neill's independent analysis were:

- ***There was NO respirable silica detected in any worker exposure or local area sample taken during the application of the SUPERCAP SC500.***
- ***There is NO foreseeable exposure to respirable silica above OSHA's permissible limit to any of the workers involved with this process.***

For more information, please contact LATICRETE SUPERCAP Technical Services and/or visit:
<https://www.osha.gov/silica>