



## FAA Wright Buildings

WASHINGTON, DC

We were contracted by OLBN to perform mortar and interior paint sampling and analysis for the Wilbur and Orville Wright Federal Buildings (WWFB and OWFB) in Washington, DC. These buildings are a pair constructed between 1961 and 1963 for the General Services Administration. They are rectangular steel frame structures, encased in concrete and clad in marble. On the interior, there have been various phases of layout alteration and refinishing. The findings of this study will be used for documentation purposes within an historic structures report.

Four mortar and six paint samples were taken from locations determined onsite by the conservator in consultation with the client. The mortar samples were analyzed at our in-house laboratory, utilizing microscopic imaging and standard wet chemical analysis. To that end, a portion of the sample was crushed, weighed and digested in dilute hydrochloric acid to remove the acid-soluble portion of the sample. The insoluble portion of the binder, or "fines" (residue of pigment, clay, or cement) and aggregate were separated via filtration. The aggregate and insoluble binder portions were weighed to determine the acid-soluble portion of the sample. The aggregate portion was examined and the overall color, shape, and grading of the sand was described.

The paint samples were cut to reveal fresh cross-sections and prepared for mounting. Samples were embedded in foam-board and studied under a Meiji Stereo Zoom Microscope (7X-45X) in normal reflected light and under illumination conditions that stimulate daylight (fiber optic illuminator) for the purpose of color-corrected stratigraphy identification. All layers were recorded using a descriptive color name rather than a standardized color notation system. The earliest layer was matched to a standardized universal color system (Munsell) and commercial paint color system (Benjamin Moore).

MORE INFORMATION:

<https://evergreene.com/projects/mortar-and-paint-analysis-faa-wright-buildings-washington-dc/>

## SERVICES PERFORMED

Decorative Finishes Analysis  
Mortar Analysis  
Paint Studies

## PROJECT DETAILS

**OLBN**  
Architect

